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Urban-Regional Imbalance and Chilean National Development.

Jose Washington Stevenson
Louisiana State University and Agricultural & Mechanical College

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URBAN-REGIONAL IMBALANCE AND CHILEAN NATIONAL DEVELOPMENT

A Dissertation

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Jose Washington Stevenson
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I, of course, assume the sole responsibility for the views expressed in this dissertation.

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ABSTRACT

In recent years there has been a growing awareness among developing countries that a solution to the problem of urban/regional imbalances in the distribution of resources and activity can contribute to improving the prospects for overall national development and modernization. Chile's Regional Development Act of 1974 is a policy designed to balance regional and local claims to resources, while geared to the central objectives of overall national development and modernization.

The Regional Development Act establishes a new political, economic and administrative system in order to overcome handicaps that have hindered internal development in the past. The former system centralized all activity in Santiago, the capital of the country, depriving the nation of harmonious and simultaneous growth in all regions. Activity and resources originated in Santiago and, as a result, a large portion of the population gravitated to its wealth. This created serious problems of urban overpopulation, rural depopulation, economic imbalance and pockets of extreme poverty. On the other hand, the strategy of national development based on import-substitution industry further stimulated the preeminence of Santiago, thereby accentuating the patterns of urban/-regional imbalance.

Under the new system, the country is divided into thirteen geographic regions, including the Metropolitan Region of Santiago. These are to function as developmental instruments and as components of a national system of urban/regional development and decision making decentralization. In addition, a strategy of export diversification is emphasized so that future development is structured on the bases of

those activities in which the country has comparative advantages. This signifies the establishment of priority sectors in agriculture, mining and those areas of the industrial sectors oriented to exports. The development scheme also includes a reduction of the relative size of the public sector, and social development which eliminates poverty.

The major theoretical finding of this study is that the assumption that export diversification will help reduce urban/regional imbalances is not borne out. On the other hand, the geographic decentralization of the country's decision making structure emerges not only as a cure for the specific problems of regions and cities, but as a way to solve the more acute problems of underdevelopment.

INTRODUCTION

The purpose of this study is threefold. First, to review the various factors accounting for Chile's sequences of urban/regional growth through time and the trends that warranted the formulation of a national policy for development. Second, to analyze the patterns of state response to the problem of urban/regional imbalances in the distribution of resources and activities. Finally, from an evaluation of conceptual and policy objectives, this study presents research findings on the feasibility of the new perspectives to provide the conditions conducive to the solution of Chile's urban/regional imbalances in the distribution of resources and activities.

National Policy

Of the approaches to overall national development pursued by Chile since the move towards authoritarianism in 1973, the Regional Development Act of 1974 suggests innovative guidelines not only for developing countries but for some developed nations as well.

One set of objectives is intended to reduce disparities in economic activity, income, prosperity and welfare between regions and between cities. This is expected to change the existing pattern of internal migration. A second set provides for the application of levies to limit the growth of the primary city and to promote the development of secondary cities, while a third category of objectives promotes the effective extension of national sovereignty to the border areas. The latter includes special ecomonic incentives and state investment to stimulate growth and land occupancy in those areas. Finally, a fourth set of objectives provides for the geographic

decentralization of the national administrative structure delegating decision-making powers to administrative units created for this purpose.

National Development

A key aspect of Chile's Regional Development Act common to policy-makers of developing countries is its commitment to national economic growth, or "the rate at which nations generate wealth."[1] The interest of developing countries in economic growth as a major political issue springs from a variety of reasons. The demand created by growing populations, the aspirations of new leaders, the search for social justice, and the removal of colonial vestiges are just a few. More recently, the view that a sound economy accelerates modernization tends to dominate.

The ambition of this proposition is matched only by its vagueness, for a question of fundamental importance centers on what constitutes modernity. Much of the trouble lies in the word "modernization" itself. At a minimum, its components include "industrialization, urbanization, social mobilization, differentiation, secularization, media expansion, increasing literacy and education, (and) expansion of political participation."[2]

The Problem

The challenge of developing countries in their quest for modern-

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[1]Edward J. Williams and Freeman J. Wright, Latin American Politics: A Developmental Approach, (Palo Alto, Cal.: Mayfield Publishing Co., 1975), p. 21.

[2]Samuel P. Huntington, "The Change to Change: Modernization, Development and Politics," Comparative Politics, 3 (April, 1971), no. 3, p. 288.

ization, as in the case of Chile, is therefore manifold. Within the context of limited resources unevenly distributed in space, they are to promote modernization for the overall progress of the nation. However, in the process, they must also meet the needs of the different regions in keeping with the geographical distribution of the population. In other words, they must find the aims and means to satisfy demands for higher standards of living, to meet the service needs to expanding populations, to raise productivity, and to ensure the sharing of the fruits of material and social progress among the people living in all parts of the country. Chile's Regional Development Act of 1974 is a response to this challenge.

Implications

The policy objectives of the Regional Development Act of 1974 are designed to solve national problems, especially in their economic dimension. However, they also raise new issues. For example, can the impact of export diversification on the effective extension of national sovereignty to border areas be assessed? As peripheral regions grow, what is the danger that increased control by the regions' entrepreneurial elite may lead to competition and, eventually, to confrontation rather than integration with the national government?

It is anticipated that this study will establish the framework within which new issues may be identified in Chile's long march toward overall national development and modernization.

Organization of the Study

Chapter I stipulates the role for the process of urban/regional development in the general process of development and modernization.

Chapters II and III outline the underlying physical, historical, political and socio-economic factors responsible for Chile's urban/-regional structure.

Chapter IV reviews the role of population and urbanization in explaining the problem of urban/regional imbalance. This chapter also shows how, in the case of Chile, population and urbanization are related to the adoption of an urban/regional development scheme as a governmental policy.

Chapter V describes the patterns of political behavior toward Chile's urban/regional problems, including the role of planning. Chapter VI describes the policy objectives and instruments of the Regional Development Act of 1974 and their implications. Finally, Chapter VII presents conclusions and projections for the future.

CHAPTER I

Economic Growth, Modernization and Urban/Regional Imbalances
The Political Aspects

The basic agreement between economic growth and modernization by developing countries represents two practical political implications. On the one hand, it allows governments to promote the cause of economic growth without reservation, since the attainment of such components of political and social development as legitimacy, stability, participation and general well-being is bound up with future national prosperity. The assumption is that, in Seymour Lipset's words,

> ....if a government is effectively providing citizens with what they want in life than when they are not, over time this may give legitimacy to a political system. In the modern world, such effectiveness means primarily constant economic development....Those nations which have adapted most successfully to the requirements of an industrial system have the fewest internal political strains.[1]

Gabriel Almond and G. Bingham Powell make a similar comment:

> When an economy develops new capabilities--new systems of production and distribution--the loading of the political system with demands for welfare may be significantly reduced, thereby affecting political development.[2]

Charles Anderson, for his part, provides the following observation on Egypt's Gammal A. Nasser's emphasis on economic development:

> For Nasser, rapid economic development was to be the foundation for national power, to assure independence and to

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[1]Seymour M. Lipset, Political Man: The Social Bases of Politics, (Garden City, N. Y.: 1960), p. 50. See also James Coleman, "Conclusion," in Gabriel Almond and James Coleman, eds., The Politics of the Developing Areas, (Princeton: Princeton University Press, 1960), pp. 532-576.

[2]Gabriel Almond and G. Bingham Powell, Comparative Politics: A Development Approach, (Boston: Little, Brown & Co., 1966), p. 39.

build a more satisfactory social order.[3]

On the other hand, the relationship between economic growth and modernization permits governments to assert state control of the move toward modernization via economic growth. Anderson puts it as follows:

> The need for the state to vigorously assert its powers in the name of economic development is argued in many ways. In the first place, the state appears to many leaders of developing countries as the only really modern institution in the society. The state is the institution best suited to the accumulation of capital, to marshaling initiative and resources necessary for major economic undertakings. Only the state has the organizational capability appropriate to the total task of modernization.[4]

The road to modernization through economic growth is beset by obstacles. A major challenge is the problem of urban/regional imbalances in the distribution of resources and activities. Differential flows of development factors such as labor, capital and commodity flows inherent in economic and technological development tend to generate rapid and sustained growth in some areas and stagnation or decline in others.

One result of such polarized development is problems of welfare inequalities between regions in a country, creating tensions and distress in the midst of plenty which may become a political issue.[5] In the United States, as an example, the recognition that some areas lagged behind the country's levels of economic and social well-being in the

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[3]Charles Anderson, et al., Issues of Political Development, (Englewood Cliffs, N. J.: Prentice-Hall, 1974), p. 206.

[4]Ibid., p. 231.

[5]Interregional and interurban disparities can be measured by different variables or indicators; economic indicators such as per capita or median family income, rate of (un)employment, rate of in- or out-migration; social indicators such as levels of education, health and housing; political indicators such as power relations; demographic indicators such as rates of population growth, urban-rural distribution, family size, age structure.

midst of rising incomes and improved standards of living led to the enactment of measures directed toward reducing existing welfare inequalities.[6] The Public Works and Economic Development Act of 1965, together with the Appalachian Regional Development Act of that same year, provided the legislative framework to assist the hard-core poverty area of West Virginia and other regions of the country to overcome a record of unemployment, low income, and population loss.[7]

Elsewhere, chronically-depressed areas such as southern Italy, the northeast of Brazil, Turkey's northwest, Venezuela's Guayana, the British Midlands, northern Japan, Colombia's Oriente, Indonesia's outer islands, the Maritimes in Canada, Israel's Nigev, or Russia beyond the Urals have similarly elicited a variety of state schemes toward closing the "gap" in growth, income and welfare.[8]

The factors which place some regions at an advantage in relation to other regions within the same country also underlie a spatial phenomenon which transcends national boundaries: the trend toward the

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[6]Harry M. Caudill, Night Comes to the Cumberlands, (Boston: Little, Brown & Co., 1963); Leo Fishman, ed., Poverty Amid Affluence, (New Haven, Conn.: Yale University Press, 1965).

[7]John Cumberland, Regional Development Experiences and Prospects in the United States of America, (The Hague: Mouton, 1971), pp. 90-118. See also Peter Lloyd and Peter Dicken, Location in Space. A Theoretical Approach to Economic Geography, (New York: Harper & Row, 1972), pp. 249-255.

[8]Interregional disparities of income for 24 countries have been analyzed by Jeffrey Williamson, "Regional Inequalities and the Process of National Development: A Description of the Patterns," Economic Development and Cultural Change, 13 (July, 1965), no. 4, Part II. See also Stefan Robock, Northeast Brazil: A Developing Economy, (Washington, D. C.: The Brookings Institute, 1963); F. E. Ian Hamilton, The Moscow City Region, (London: Oxford University Press, 1976); Franklyn Holzman, "The Soviet Ural-Kutznetsk Combine: A Study of Investment Criteria and Industrialization Policies," Quarterly Journal of Economics, 71 (August, 1957), no. 3, pp. 368-405; Gerald Manners, Regional Development in Britain, (London: Wiley, 1972); John Friedmann, Regional Development Policy: A Case Study of Venezuela, (Cambridge, Mass.: MIT Press, 1966).

exaggerated growth of major metropolitan centers to the detriment of secondary and lesser-order cities. To ease the trend, a number of urban planning and development strategies have been implemented ranging from the creation of new cities in peripheral undeveloped areas, such as Ciudad Guayana in Venezuela and Brazil's new capital Brasilia,[9] to the development of intermediate-size and "satellite" centers such as the New Towns in England and the "equilibrium metropolises" in France.[10]

It is interesting to note that although the problem of urban/-regional imbalance is characteristic of the internal area structure of most countries of the world, as recently as two decades ago, the idea of urban/regional planning was all but unknown. Yugoslavia is a notable exception.[11]

With the 1960's however, the international wave of concern for national economic development, urban/regional planning and development has emerged as an indispensable prerequisite for supporting a general policy of economic development.

It must be pointed out that in the developed countries the change of view came as a result of the urban crisis present in each to a greater or lesser extent. In England and France, for instance, many of the ills associated with the urban crisis stem from the unrestrained

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[9]Lloyd Rodwin, ed., Planning Urban Growth and Regional Development. The Experience of the Guayana Program in Venezuela, (Cambridge, Mass.: M.I.T. Press, 1969); Walter Stohr, Regional Development Experiences and Prospects in Latin America, (The Hague: Mouton, 1975), 144-147; 153-155.

[10]Lloyd Rodwin, Nations and Cities. A Comparison of Strategies for Urban Growth, (Boston: Houghton Mifflin, 1970); Niles Hansen, ed., Public Policy and Regional Economic Development. The Experience of Nine Western Countries, (Cambridge, Mass.: Ballinger, 1974).

[11]Albert Waterston, "On Planning Economic Development," Economic Development and Cultural Change, 13 (July, 1965), no. 4 Part I. p. 487.

sprawl of the main urban areas of labor inflow within their major metropolises. Such a development has imposed large social capital expenditures--especially in traffic control and new road network expenditure--on each countries' national and local governments.[12]

In the United States, the main issues of the urban crisis are variously related to the burdens involved in cities' taxing and spending problems,[13] the deterioration of urban public services,[14] city environment and health,[15] and even the failure of community sustaining norms and institutions.[16]

Generally, the focus of the urban/regional theme on the urban crisis has given rise to a number of answers to the crisis. In the United States, for instance, concern about the quality of life in cities has shaped the objectives of urban policy toward downtown urban renewal and the development of new urban centers at the immediate fringes of major metropolitan centers, such as the planned suburban areas.[17]

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[12]Lloyd and Dicken, op. cit., p. 242 (England); p. 246 (France).

[13]John Lindsay, The City, (New York: Norton, 1970).

[14]Edward Banfield, The Unheavenly City, (Boston: Little, Brown & Co., 1970), pp. 185-209.

[15]Readings from Scientific American, Cities. Their Origin, Growth and Human Impact, (San Francisco: W. H. Freeman, 1973). Part II.

[16]Daniel Moynihan traces the urban crisis in the United States to the erosion of institutions by which people in the mass related to one another. The deterioration of primary associations such as the family, the local community, and other traditional associations has left individuals isolated, and it is this isolation, exacerbated and accentuated in the city, which constitutes, in his view, the crisis of urban life. See Daniel Moynihan, Maximum Feasible Misunderstanding, (New York: Free Press, 1969) and Toward a National Urban Policy, (New York: Basic Books, 1970).

[17]The move to suburbia however has created additional problems for both central cities and suburbs, especially transportation and traffic problems. See Michael Danielson, Federal-Metropolitan Politics and the Commuter Crisis, (New York: Columbia University Press, 1965).

In the developing countries, the growing awareness of the urban/-regional theme has its origins in the implementation of a strategy of national development based on domestic manufacturing. As it is now understood, favoring industry over other sectors of the economy has obvious effects on urban/regional patterns of growth. Most industries locate in cities, and in developing countries most industries locate in the largest cities because of the advantages of infrastructure, communications, and other positive agglomeration economies not available in smaller cities.[18]

As a consequence, a strategy of development based on domestic manufacturing stimulates a polarization of cities and significant differentiations in the rates of economic growth and welfare expansion in individual regions and cities. It also generates such feature of underdevelopment as dual economies in which a small advanced economic sector co-exists with a large backward sector along with corresponding socio-political problems of national disintegration.[19]

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[18]Compare the trend toward the decentralization of manufacturing in the United States. Taking advantage of such factors as increased mechanization and automation of production work and manufacturing and hence, lesser dependence on a massive labor market, industrial activties have begun to scatter toward smaller towns or within rural areas. The dispersal of industrial plants however has not stopped the growth of the larger cities, partly as a reflection of the shift of an increasing percentage of the labor force from agriculture, mining and manufacturing toward the work of a white collar category.

[19]Bert F. Hoselitz, "The Role of Cities in the Economic Growth of Underdeveloped Countries," in Gerald Breese, ed., The City in Newly Developing Countries, (Englewood Cliffs, N. J.: Prentice-Hall, 1969), pp. 232-245. See also Cambridge Conference Report, "The Role of Industry," in Ronald Robinson, Developing the Third World: The Experience of the Nineteen Sixties, (Cambridge, England: Cambridge University Press, 1971), pp. 65-84.

It goes without saying that the focus of the urban/regional theme in developing countries has centered on a solution to the spatial pattern of economic and welfare imbalance. Such a solution appears to offer not only a cure for the specific problems of cities and regions, but a way to solve the more acute problems of underdevelopment.

However, whereas developed countries can define their urban/-regional problems from the vantage point of industrialized, affluent societies, the developing countries must define theirs on meager technological and financial resources. Whereas the developed countries possess urban systems which need partial and isolated adjustments, especially in their interurban dimension, the less developed countries have incipient, little diversified urban systems that are very unbalanced.

Consequently, while the developed countries can afford to concentrate on partial and isolated solutions, the developing countries are forced to seek comprehensive solutions containing great risks for their urban/regional system, if not for the entire politico-administrative system of government.

The challenge of developing countries therefore is to find an urban/regional policy concerned with the reorganization of the urban/-regional system, the correction of imbalances in regional employment, income and welfare, and geared to the central objectives of economic growth and modernization. At the same time, to ensure the proper orientation of the instruments which should be used to promote urban/-regional development, such a policy needs review the factors underlying the consolidation of the urban/regional system in space through time and its concomitant process of spatial differentiation in the distri-

bution of resources and activity. Chile's urban/regional experience helps to illustrate this point. Consequently, the following chapters review the various factors accounting for Chile's urban/regional structure, the trends that warranted the formulation of an urban/-regional policy in 1974 and the objectives pursued by policy of this sort.

CHAPTER II

Chile's Urban-Regional Imbalances
The Geographic Dimension

Chile occupies the long, narrow side of the western slope of the Cordillera of the Andes in South America, between latitude 18 20' and 50 south, a distance of some 2,600 miles. Bordered by Peru, Bolivia and Argentina, the country's total area is 286,397 square miles of the South American continent, 482,625 square miles of Antarctica, and 70 square miles of Oceania (Easter Island). The long, thin strip of continental Chile is filled with geographical contrasts and with a wide range of natural and human environments that bestow upon the country a variety of landscapes, and a multiplicity of resources.

Geologic metallic and non-metallic resources in the Saharan landscape of the North have generated an intense mining activity for centuries. Favorable soil conditions and abundant water resources in the mediterranean landscape of the Center have combined historically to make possible agricultural and forestal economies, while natural prairies and oil deposits in the Norwegian landscape of the South have become the foundations for livestock and petroleum activities, respectively. Similarly, and throughout most of the territory the Andean mountains to the East are packed with hydrological and hydroelectrical resources, whereas the Pacific Ocean on the West conceals a largely untapped wealth of sea resources.

Against this diversified geographic backdrop, the historical process of national growth and transformation gave rise to the configuration of distinct zones or inter-regional systems of population settlement and concurrent modes of inhabitability/production relationships

(see Figure II-1). The zones include the northern interregional system, the central interregional system, and the southern interregional system.

The Northern Interregional System

It includes Regions I, II, III and IV, between latitude 18 20' and 32 south, and corresponding to the former provinces of Tarapacá, Antofagasta, Atacama and Coquimbo, or about 40 percent of the total national area. The system possesses approximately 8.9 percent of the country's total inhabited area and 20.9 percent of the total potentially inhabitable area.

The most important physical feature of the System is given by its orographic orientation: north-south, in Regions I and II; east-west, in Regions III and IV.

On the East the Cordillera of the Andes rises as a vast highland of uniform altitude, and is dotted with volcanoes, many of them active. The coastal range, to the west, is lower than the Andes. Between the ranges lies the intermediate depression, characterized by wide and arid plains referred to as "pampas". Along the western edge lie the narrow coastal plains and the continental shelf.

Both the coastal range and the intermediate depression are less pronounced in Regions III and IV as stream erosion in past geologic periods carved transverse valleys that shaped the east-west orographic trend typical of these two regions.

The entire Northern Interregional System is under the influence of dry climates with some north-south and east-west variations. The extreme desert climatic conditions (Koeppen's BW) is found in the

intermediate depression. Geographically, the desert zone stretches from the border with Peru in the north down to the city of Chañaral (26 30' S. lat.) in the south. In the coastal plains, the moderating influence of the cold ocean current of Humboldt creates a mild climate (BWn) featuring lower variations in day and night temperatures and higher frequency of cloudiness. Further south, and especially in Region IV, a warm steppe climate is possible due to gradual increases in precipitation levels.

In terms of water resources, increased rainfall resulting from altitude in the north and latitude in the south permits the existence of a number of water courses of modest proportions. Near the northern border with Peru, in the Arica area, is a system of small gullies with short streams that give rise not to valleys per se but to what could be called "elongated oases" running from east to west. Some agriculture and fruit growing is carried on there, especially citrus fruit farming.

South of this area, the oases disappear, replaced by vast "pampa" areas, of which, the Pampa del Tamarugal is the largest. Its name comes from "tamarugo", a low-branched tree whose fruit is used for feeding small flocks of sheep, llama, and other animals, thus permitting a limited hunting and herding economy. At the Loa river, in Region II, where the costal range's elevation increases, the Pampa del Tamarugal ends and the Atacama desert begins, one of the driest in the world.

The Loa, which rises in the salt marshes of Carcote, has a hydrographic basin of over 12,000 square miles. Such an extended basin allows the Loa River to catch the waters from rainfall and underground

sources, but its water runoff volume reaches a mere $5m^3$/sec or 177 ft^3/sec. There are no rivers in the Atacama.

The next river is 300 miles south, the Copiapó, where the system of transverse elongated oases reappears. Further south, the water volume carried by rivers is still low but enough to allow a varied irrigated agriculture, principally fruits.

From Arica to Copiapó, also referred to as "Norte Grande", the basic resources are copper, nitrate, salt, fish, and allied industries. In addition iron, sulphur, gold, silver, molybdenum, quartz, and kaolin are mined. Agriculture, which is centered in the stream oases in the gullies of the extreme north, is on small scale. From Copiapó to La Ligua, or "Norte Chico", the principal resources are copper, iron, gold, silver and mercury. Agriculture is more important, especially fruit farming.

Because of aridity, population in the Northern Interregional System is widely-scattered, so as to utilize water resources wherever they are available. The settlement pattern is generally oriented along a transverse axis of penetration with respect to the longitudinal axis of the country. Expansion of the settlement pattern is dependent on water flowing from the Andes or from underground sources, both of which secure a degree of agricultural activity and mining.

The Central Interregional System

From the Aconcagua River to the south, the Central Interregional System begins. It is a wide system of valleys and transverse rivers whose ample flows permit the irrigation that makes this area extremely productive.

The system includes Regions V to X, between 32 to 44 south latitude, and corresponding to the former provinces of Aconcagua and Valparaíso (Region V); Santiago (Metropolitan Region); C'Higgins and Colchagua (Region VI); Curicó, Talca, Maule and Linares (Region VII); Nuble, Concepción, Arauco and Bío-Bío (Region VIII); Malleco and Cautín (Region IX); and Valdivia, Osorno, Llanquihue and Chiloé (Region X).

The system includes about 22.5 percent of the total national inhabitable area. In addition, it comprises 29 percent of the total national area.

On the East the Andean mountains exhibit a massive and continuous shape. Volcanoes proliferate. Mountainous ridges that run from the Andes to the Pacific serve as natural borders for the string of lakes that is present south of the Bío-Bío river and down to the city of Puerto Montt. The coastal range is devoid of volcanoes and tends to disappear to the south.

From Puerto Montt south the topography changes completely. The intermediate depression, also knows as the Central or Longitudinal Valley, sinks below sea level to create the Gulf of Ancud. Then appears the island of Chiloé, geologically a part of the Andean cordillera system.

The Central Interregional System enjoys a wide distribution of climatic zones. The northern four-fifths includes a number of mediterranean types such as Koeppen's Csb, Csb_2, $Cfsb_1$, and $Cfsb_2$, while the southernmost fifth exhibits the temperate-cold-rainy maritime type of climate (Cfb). Variations in climate are mostly determined by increasing precipitation southward. In Santiago, for example, at 33°S.

latitude, rainfall averages 360 mm. or 14.2 inches annually, whereas in Valdivia, at 39°S. latitude the yearly average soars to 2,511 mm. or 99 inches.

From the Aconcagua to the Bío-Bío rivers are torrents. Since these rivers originate high in the Cordillera, their greatest flow occurs in summer when the snow melts. To take advantage of the great drop in altitude, reservoirs and hydraulic plants have been built in order to catch and regulate the water's outflow for the dual purpose of hydroelectric power generation and irrigation. The seasonal distribution of the rains--dry summers and wet winters--makes irrigation essential.

From the Bío-Bío southward the character of the rivers changes. They become tranquil streams that wind their way through handsome forests. The relief of the hills, which is more irregular than the hills north of the Bío-Bío, and the deeper, more confined river beds make irrigation more difficult. However, at this latitude (about 37° south), the average rainfall increases manifold, and is distributed throughout the year so that there is less dependence on irrigation.

Vegetation in the Central Interregional System changes from north to south and from west to east as a result of precipitation levels that vary with increased latitude and altitude, respectively. While the northernmost area of the system is covered with shrubs, the southernmost area is characterized by dense forests; in between lie vast stretches of grassland and natural forests.

Most of the system's vegetation resources have been subjected to extensive destruction either by the clearing of land for agricultural purposes or by their utilization for fuel and lumber. The process has

resulted in problems of soil erosion.

The area from the Aconcagua River to the Bío-Bío, or central-north zone, is the heart of the country and the cradle of Chilean nationality. Its economy is varied, with mining, agriculture, stock raising, logging, manufacturing, large urban centers, and the capital city. The principal mineral mined is copper, but gold and silver, limestone, quartz, slate, kaolin, and talc are also exploited. This area is also the traditional farming center, producing wheat, maize, oats, beans, peas, lentils, barley, potatoes, beets, rice and tobacco. Among the fruits grown are peaches, cherries, apples, pears, apricots, melons, watermelons, grapes, oranges, lemons, avocados, almonds and walnuts. It is also the main center for meat, poultry, eggs, and milk.

The largest manufacturing centers are in this area. Here are located Santiago, the capital, Valparaíso and San Antonio, its principal ports, and other important cities such as San Felipe, Los Andes, Viña del Mar, Quillota, Rancagua, San Fernando, Curicó, Talca, Linares, and Chillán.

To the south, between the Bío-Bío and Chiloé island, lies the system's central-south zone. Within this zone, between the Bío-Bío and the Lastarria range, is the Concepción area. Primarily an agricultural and manufacturing center, it also produces coal, slate and kaolin. The main farm products are wheat, rape, and sugar beets, and stock raising is an important industry. The area's vast natural forests make it the chief supplier of wood and pulp. Huachipato, the country's iron and steel plant, is located in the Concepción area, as are the most important industries of cellulose, paper manufacturing, petrochemicals, and petroleum refining. Fishing and related industries are

strong. The development of this area has been almost explosive, and since it has an abundant supply of electricity, good port services, and excellent university and technical training centers, its future prospects are promising. The main cities in the area are Concepción, with its port of Talcahuano, and Los Angeles, Lebu, Angol, and Temuco.

The lake region is between the Lastarria range and Reloncaví Sound at Puerto Montt. Its beauty and abundant lake fishing make it the country's tourist attraction. The chief mining product is coal, although mining is not on a very large scale. Its agricultural activity is similar to that of the preceding area. The lake region features footwear industries, a sugar refinery, meat packing plants, and is also a large producer of shellfish. Since it was the center of German inmigration in the second half of the nineteenth century, its urban landscape and wooden architecture have a European appearance. Its principal cities are Valdivia, Osorno, and Puerto Montt.

At the far south of the Central Interregional System is the island of Chiloé. Remarkable seamen, the inhabitants of Chiloé have for centuries sailed the channels south of the island, helping to open up the area for settlement.

In terms of population settlement, the Central Interregional System's marked continuity of space and uniform endowment of resources has contributed to a notable concentration of population and high density of settlement.

The Southern Interregional System

The third and final system of population settlement in continental Chile is that part of the national territory between latitudes 44

and 56 south. It includes Regions XI (Aysén) and XII (Magallanes), with about 11.2 percent of the total national inhabitable area. The system comprises 31.3 percent of the total national area.

The topography exhibits a rather chaotic aspect. The eroding effect of glaciers and rise of sea level since the last ice age has permitted the penetration of the Pacific waters deep into the interior through an inordinate number of fiords and channels to the point of actually severing the continent at the Magellan Strait. The area is a dissected pattern of thousands of islands, rocky peaks, and a maze of channels and fiords. The Andes seem to explode into this infinity of islands and channels, giving way to western Patagonia and culminating in the tundras of Magallanes.

Climatically, the northwestern segment of the system is a continuation of Koeppen's temperate-cold-rainy maritime climate (Cfb) present in the southernmost portion of the Central Interregional System. The southwestern part reveals a still colder variation of this type of climate combined with an increase in humidity (Cfc). Rainfall may average 3,000 to 8,000 mm. or 118.2 to 315.2 inches.

Conversely, the eastern half of the Southern Interregional System includes both steppe-like (BSK and ET) and tundra (ETi) types of climates, and is characterized by marked temperature fluctuations and a considerable decrease in rainfall. The river flows reach breath-taking proportions. The Baker River, for instance, carries a water runoff volume of 900 m^3/sec. or 31,783 ft^3/sec.

Vegetation varies from north to south and from west to east under the influence of the sea and winds. Intensive rainfall in the western half of the system allows the development of rainforests, while the

tundra landscape on the eastern half not affected by the sea permits the growth of moss and lichens. The Patagonian "pampas" favor the cold-steppe association of small shrubs and bushes. Finally, decreasing precipitation on the eastern slope of the Andes makes possible the existence of grassland.

The principal mining products are petroleum and lead. The vast pasturelands of Region XII make it the largest producer of sheep and wool. This Region also has stands of virgin forests, abundant fish and shellfish resources, and manufacturing industries in Punta Arenas.

The Southern Interregional System is an area recently incorporated into the economic fabric of the country. Its potential wealth remains to be discovered and exploited. Its principal cities are Coyhaique, Puerto Aysén, Punta Arenas, and Puerto Natales.

From a population settlement point of view, the peculiar geomorphological characteristics of the system has acted as a drastic environmental factor conditioning inhabitability and settlement. As a result, the area is sparsely populated, with the population concentrated in a few urban centers.

SUMMARY

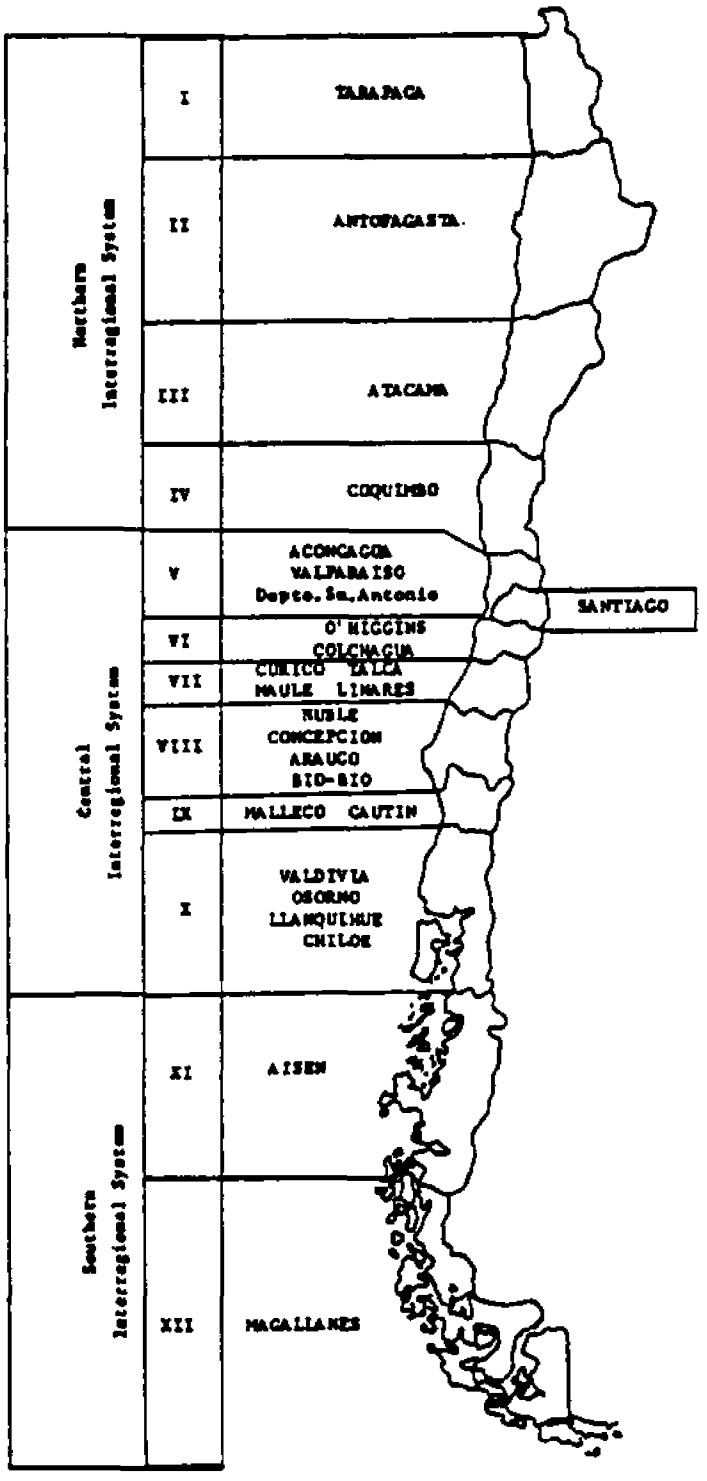
On the whole, the combined effect of Chile's geographic form, variety of environments and diversity of resources has helped shape the country's process of urban/regional growth and related patterns of population and economic activity distribution. Thus, limiting environmental factors such as lack of water and high temperatures in the Northern Interregional System, and excess of water and low temperatures in the Southern Interregional System, have oriented settlement

towards the Central Interregional System where the existence of steady sources of water and mild temperatures makes human life easier.

At the same time, the evolution of Chile's cities and their specialized regional hinterlands of agricultural, extractive, or other type of activity, reflects the positive or negative impact upon any given region or city resulting from variations taking place in the national and international economic fabric. To be sure, the configuration of Chile's urban/regional structure occurred within a framework of constraints set by the various phases of the process of national transformation. As such, historical changes of structure, direction, and rates of growth of a given city/region varied with changes in the central variables of the national economy and its associated polity, including the latter's changing relations with the international economic structure.

The above contention helps conceptualize the configuration of Chile's urban/regional system over the national geographic space into consecutive phases, namely the 1541-1818 "traditional" stage; the 1818-1914 "pre-industrial" stage; the 1914-30 "transitional" stage; and the 1930-1973 stage of "incipient industrialization" and "stagnation". Chapter III tackles this matter.

FIGURE II-1



SOURCE: Comisión Nacional de la Reforma Administrativa (CONARA), Chile Hacia un Nuevo Destino: Su Reforma Administrativa Integral y el Proceso de Regionalización, Documento 2. Santiago. Junio, 1976. p. 18

CHAPTER III

Chile's Urban/Regional Imbalances
The Socio-Political and Economic Dimension

The Traditional Stage (1541-1818). In full agreement with mercantilist conventional wisdom, the initiation of the Spanish conquest and occupation of Chile by Pedro de Valdivia in 1541 was followed by a rapid exploration and envelopment of the country's territory in a search for precious metals and quick riches.

These earthly considerations were to have paramount consequences in terms of population settlement. The rapid depletion by the end of the sixteenth century of the few gold deposits easily exploitable by crude, simple methods of production readily prompted a shift of the conquistadors' gold fever for land fever as a form of wealth and status. In so doing, possession of large landholdings, "latifundio," and a steady supply of Indian labor became the prime motive behind the Spanish colonizing drive up to the time of the country's independence from Spain in 1818.

Not surprisingly, in almost 300 years of colonial rule, most of the town and city foundation took place between the Elqui and Bío-Bío rivers, or the central-north zone of the Central Interregional System. This was the area possessing the best agricultural and grazing lands, the largest concentration of Indians, the broadest facility of external communications, and the most pleasant climatic conditions. Wherever these factors could be harnessed together, a population settlement was established. Such was the origin of cities such as La Serena, Santiago, Valparaíso, Concepción, and most cities of central Chile (see Table III-1).

Settlement beyond these two natural borders was checked in the north by lack of opportunity within the desert; on the south, by the embattled frontier centered around a war with the Araucanian Indians. The war in turn conditioned the establishment of population centers south of the Bío-Bio and down to Chiloé island to sites displaying decisive security advantages against Indian attacks. Cities such as Angol, Tucapel, Villarrica, Valdivia, Osorno and Castro owe their present location to this initial consideration. South of Chiloé, environmental factors characteristic of the Southern Interregional System made settlement prohibitive.

In the sixteenth century, Santiago itself had to collaborate continuously in the war against the Araucanians. From the seventeenth century on the war became the responsibility of a standing army.

Thus were established the two poles of colonial Chile: the embattled frontier, centered in Concepción, first delimited by the Maule and Bío-Bío rivers and later extended down to Valdivia; and the pacified area, which included Santiago and its territory as far south as the Maule river, north to La Serena, and east to Cuyo, in present-day Argentina.[1] The island of Chiloé occupied an extremely isolated position.

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[1]Originally, Chile was not bounded by the Andes; it included the western part of Argentina. But from the time of Pedro de Valdivia onward, efforts were concentrated on dominating and incorporating the Strait of Magellan because of its strategic location as the bridge between the Pacific and Atlantic oceans. The push from the north to the south was stronger than any attempts to define the boundary to the east, which remained vague until the end of the eighteenth century. In 1776 the Viceroyalty of Buenos Aires absorbed the western part of Argentina (Cuyo) and the Treaty of 1818 fixed the Andes as the frontier with Argentina as far as the Strait of Magellan.

If the settlement pattern became polarized, so did the colonial institutions. The frontier was the headquarters of the army and there all citizens were more or less assigned to military duties. It was an area poor in resources, with a mixed population. The army, besides its large-scale campaigns against the Araucanians, was constantly engaged in forays in search of slaves and cattle. The authorities were the military leaders.

In the pacified area, an increasingly aristocratic society was taking shape. At first, it lived on the proceeds from placer mining and then, from the end of the sixteenth century, from stock raising and agriculture. It was a world of ranchers, poor in comparison with those of other countries of Spanish America, but who imposed an aristocratic structure on the merchants, the craftsmen, the Indians of the encomiendas and the slaves at the bottom of the social ladder. The governor, the court of the audiencia, and the municipal councils were the basic organs of government.

For the various Chilean Amerindian population, contact with the European from the year of the country's occupation proved extremely catastrophic for their numbers. The effect of warfare, imported diseases, forced labor, settlement relocation, and famines—from outright disruption or abandonment of indigenous crops—sharply reduced the estimated native population of 1.6 million[2] in the first fifty years of contact.

In many ways, the Indians' incipient stages of cultural development based on differential degrees of rudimentary fishing, hunting,

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[2]Julian Steward, ed., Handbook of South American Indians, (Cooper Square Publishers, Inc.: New York, 1963), Vol. 5, p. 658; p. 663.

gathering, or agricultural practices, could hardly counteract the superior military and technological onslaught delivered by the conquistador. The Araucanian people however, driven south of the Bío-Bío but not surrendering, successfully defied encroachment by the Spanish invader first and by the Chilean settler next until they were isolated on reservations in the 1880's.

In the pacified area the autonomous Indian communities waned and died. Those that survided were biologically and culturally assimilated to form a mestizo world in which Spain's cultural patterns ruled unchecked.[3]

In retrospect, the configuration of Chile's urban/regional system in space during the traditional stage was the outgrowth of a deliberate policy of colonization, organization and management of the country's spatial estate. Such a policy dictated the intensive exploitation of the country's primary resources, precious metals and land, in the interest of an expanding mercantilist colonial metropolis.

By the time of independence, the contraints to urban/regional growth laid by the colonizing rationale (high cost of transport and communication, strict trade monopoly, stiff restriction of foreign immigration, and low rates of economic production) has resulted in

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[3]From an ethnic standpoint, today's Chilean population is very homogeneous. This is perhaps due to geographic and cultural isolation which lasted for much of Chile's early history. The large population group is of mixed Spanish-Indian (mestizo) ancestry. However, a small but influential number of Irish and English immigrants came to Chile during the colonial era. An important stream of German immigration started in 1848 and lasted for 90 years. Other significant immigrant groups are Italian, Yugoslav, French, and Arab. Only 3 percent of the population are pure-blooded Indians (1970 Census) and they live mainly in the northern highlands and in the Bío-Bío area in the south. A few hundred Polynesians live on Easter Island. In Chile there has been virtually no Black immigration.

the shaping of a nucleated pattern of settlement comprised of isolated centers operating at the agricultural self-sufficient level, a condition described by W. W. Rostow as "traditional" in its stage of economic growth.[4]

The Pre-Industrial Stage (1818-1914)

In the following decades after independence from Spain in 1818 and up to 1914, Chile's major urban/regional transformations occurred as a result of a variety of mutually reinforcing factors. Foremost among these factors was the emergence of Chile as a leading exporter of agricultural and mining commodities which, in turn, ushered the country into a "pre-industrial"[5] or "outwardly-oriented"[6] stage of economic growth. Secondly, although throughout this period the population grew at the modest rate of less than 1.6 percent,[7] the accompanying gradual shift of the population from rural to urban settlement and the patterns of urban/regional imbalances in the distribution of resources and activities were to have repercussions of lasting significance to this day.

As compared to the 1541-1818 settlement modus operandi, the establishment of population centers in the 1818-1914 period was in

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[4]W. W. Rostow, The Stages of Economic Growth: A Non-Communist Manifesto, (Cambridge, Mass., 1961), p. 4.

[5]Ibid., p. 4.

[6]Hla Mynt, "An Interpretation of Economic Backwardness", Oxford Economic Papers, Vol. 6 (June, 1954), no. 2, p. 146.

[7]Despite the moderate rate of population growth, Chilean numbers increased from the estimated population of 600,000 in 1810 to 4.3 million in 1930. See Corporación de Fomento (CORFO), Geografía Económica de Chile, (Santiago: CORFO, 1965), p. 350 (1810 figure); Chile. Instituto Nacional de Estadísticas y Censo. Censo de 1930.

many ways a prolongation of the Spanish conquistador's lust for land, but with characteristics which set it apart from the same phenomenon in the 1541-1818 period. Up to the time of independence, the drive for possession of land was in the hands of a colonial aristocracy that sought land ownership as a symbol and a source of wealth and status. In this sense, land acquisition and accumulation of it thereof, although the landed class remained almost always urban, largely stemmed from a rather personal motivation.

After independence, especially from 1830 onwards, when the small landholding aristocracy in control of the government diversified into industry, mining and commerce, the nature of the drive for possession of land began to change. One reason for this change was the enlargement and reinforcement of the small landing aristocracy by new interest groups, mainly mining and commercial entrepreneurs who readily mingled and obtained through marriage or land purchase an agricultural base.

The hybridization of the ruling elite and their common interest on sustaining the unfolding of the export economy as the basis for the maintenance of their power resulted in the institutionalization of land acquisition into a national, state-backed policy of territorial expansionism. The policy proved most beneficial to the areas located outside the initial settlement pattern outlined by the Spanish colonization.

Within this general framework, Chile's urban/regional settlement pattern underwent transformations that merit specific attention. Beginning in 1830, foreign trade became not only the hallmark of the newly-independent state but also the key mechanism through which the Chilean economy integrated itself into the fabric of the international

trading system. As a consequence, changes of structure, functions, and rates of growth in the national urban/regional system began revolving around variations in the size, composition, and stability of world export demand.

In essence, the benefits generated by the extraordinary expansion of Chile's export sector greatly favored the area where the organization of production and class structure more closely connected with the export economy was located, i.e., the central-north zone of the Central Interregional System, despite the fact that the leading export sectors were located elsewhere. Indeed, wheat production was centered in the central-south zone of the Central Interregional System; nitrate and copper in the Northern Interregional System.

As a result, the national areas actually contributing to the material progress of the nation came to follow rather than lead the process of national development and, as such, their rise or decline and concomitant patterns of urbanization became intimately bound to the changing relations between the national ruling elite and the world demand for export commodities. The events leading to the shattering circumstances derived from the 1930 Great Depression help demonstrate the critical interaction between export and internal urban/regional growth.

By the time of independence in 1818, the increasingly limited availability of land resulting from both the conquistador's natural population growth and their inability to settle beyond the Elqui and Bío-Bío frontiers had pushed a growing proportion of the colonial population to urban residential patterns. Thus, 20 percent[8] of the

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[8]Corporación de Fomento, Geografía..., op. cit., p. 350.

estimated population in 1810 was urban, largely concentrated in towns and cities located within the Elqui-Bío-Bío stretch.

Beginning in 1840, the unprecedented boom in wheat exports elicited by the opening of the British, Californian, and Australian markets greatly fueled the pressures from the ruling elite for possession of the Indian-held hinterland south of the Bío-Bío. The move resulted in the first institutionalized, national territorial expansion.

Several policies underscored this first territorial expansion. One policy referred to the state-sponsored colonization of the area south of the Bío-Bío through foreign immigration. It marked the beginning of a stream of German immigrants into the central-south zone of the Central Interregional System (1848). The growth of the seaport of Valparaíso, which benefited from the new flow of seaborne trade, especially British, through the Strait of Magellan, prompted the government to occupy and settle the area of the Magellan Strait as a means to protecting the country's control of the Pacific. Thus was born the city of Punta Arenas (1843), the world's southernmost city. Finally, the pacification of Araucania was undertaken. Following a series of protracted wars, the Araucanians were finally isolated on reservations in the late 1880's.

The golden age of wheat exports continued until the 1870's. At this time, the combined effect of poor harvests and the displacement of Chilean production by the growing wheat output of the Argentine "pampas" and the United States' Great Plains signaled its demise and concurrent depressing effects to the wheat-producing area till the present.

By the 1870's however, nitrate production with Chilean capital

and labor on the northern border areas of Tarapacá and Antofagasta was sufficiently developed to fill the vacuum left by the decline of wheat exports. It was also sufficiently attractive to trigger a second institutionalized, national expansionist drive as illustrated by the annexation of the two mineral-rich areas of Tarapacá and Antofagasta, which Chile wrested from Peru and Bolivia, respectively, in the War of the Pacific (1879-1883). The annexation of these two northern areas completed the expansionist drive and converted Chile from an agricultural country, tied physically to its fertile Central Valley heartland, into a leading exporter of nitrate and copper to the world's industrializing economies.

The expansion of the settlement frontier beyond the Elqui and Bío-Bío rivers brought on important consequences in terms of urban/-regional growth and development. The establishment of new cities and consolidation of old ones elicited the redistribution of the population toward the new centers and increase in numbers in existing ones. Antofagasta and Iquique, for instance, located close to the nitrate deposits of the northern "pampa" more than doubled in population between 1885 and 1907.[9] Perhaps more significant, some of the small urban settlements, "poblados," that emerged closely associated with agricultural or mining developments were to become the foundation for the growth of medium-sized cities in the years ahead, as the cases of Chañaral, Vicuña, Ovalle, Bulnes, Lota, Coronel, and others, may illustrate (see Table III-2).

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[9]Frederick B. Pike, Chile and the United States, 1880-1962, (Notre Dame: Notre Dame University Press, 1963), pp. 118-119.

In addition to territorial and settlement expansion, an important concomitant to the export boom was its utilization by the ruling politico-economic elite as the basis for the consolidation of central power, regional dominance, and the furthering of regional and urban-rural imbalances in the distribution of resources and activities. Control of the export commodities surplus by the urban interests and political institutions of the central north zone of the Central Interregional System set the scene for the centralization of public administration and concentration of commerce, banking and public works in the urban areas of this zone, particularly in Santiago and Valparaíso, the centers where the coincidence of political and economic power was utmost.

Throughout the years from 1840 to 1914, especially after 1882, central and urban Chile became the net beneficiaries of the export-generated income and investable resources. This de facto internal colonalism fostered in turn a pattern of urban/regional and sectoral dependence that persists to this day.

On the national level, the cyclical reliance on primary export commodities as fundamental sources of foreign exchange and government revenues conditioned the country income-dependent upon the unilateral resource-earning capacity of a single export product. On the regional level, central Chile's extensive financing of urban infrastructure expenditures with export-generated resource surplus, especially nitrate-generated surplus since 1882, drew the Central Interregional System, and its central-north zone above all, increasingly dependent on the revenues produced elsewhere.

Parallel to the unfolding of the process of urban/regional and

sectoral dependence, a simultaneous process of urban-rural, interregional and urbanization differentials was in progress. A number of factors sustained the development of this parallel trend. Extreme land monopoly into "latifundios," the absence of any major latifundio sub-divisions, the relative reduction of agriculture in terms of income and employment, and the perennial flight of agricultural surplus capital to the cities, all contributed to make the city increasingly more attractive than the rural areas. Eventually, in the latter half of the nineteenth century, and in the absence of incentives to remain, the rural masses abandoned the vast latifundios of the Central Interregional System and began the large-scale internal migration movement to northern and central towns and cities. After 1914, completion of the North-South railroad and the linking of the agricultural hinterland with the urban centers and ports of the Central Interregional System through a network of highways, made such cities, and chiefly Santiago, easily accessible to the rural migrant.

The increase in the urban population was unprecedented. City and town dwellers composed 20 percent of the population in 1810; 30 percent in 1865; and 43 percent in 1907.[10] By 1930, this figure reached 50 percent.[11] From 1885 to 1907, Santiago's population increased 52 percent; Antofagasta's, 131 percent; Iquique's, 92 percent; Concepción's, 77 percent; and Valparaíso's, 39 percent[12] (see Tables III-3 and III-4).

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[10]Guillermo Rosembluth, Problemas Socio-Económicos de la Marginalidad y la Integración Urbana, (Santiago: CEPAL, 1966), p. 24.

[11]Chile. Instituto Nacional de Estadísticas y Censo. Censo de 1930.

[12]Rosembluth, op. cit., p. 24.

By 1914, some of the trends and contradictions inherent in the export economy--of which the patterns of regional and sectoral dependence, urban-rural and interregional imbalances, and internal migration were but a reflection--had become ever more difficult to ignore. Sharply marked social stratification, conspicuous consumption by the upper classes in Santiago, depressed wage levels, recurrent periods of stagnation dating back as early as the 1850's (mostly the result of price fluctuations in the international commodity market), the collapse of species payments in the 1870's--which initiated the spiral of inflation that has plagued the Chilean economy since--and brief periods of financial panic in the 1900's, were all telling factors that resulted at various times into sources of severe economic setbacks and increasing social discontent.

Yet the export revival stimulated by the outbreak of World War I deflected any desire at structural reforms and economic diversification. In fact, the tendency toward increased industrialization brought about by the breakdown of international trade during the war embarked the country in a "transitional" stage of economic growth that lay the foundations for the next stage of growth. At the same time, incipient industrialization reinforced the trend towards resource concentration in central and urban Chile.

The Transitional Stage (1914-1930)

World War I became the most important event in the history of Chile in the early twentieth century. On the regional level, heavy American investment for mining operations in both the Northern and Central Interregional Systems induced a realignment of the Chilean export economy toward a maximization of the existing urban and

transport networks in these two systems. The aim was to facilitate the exploitation of copper and other mineral resources needed by the U.S. industrial demand. On the national level, the organization of the so-called "Gran Minería del Cobre," or Grand Copper Mining, with solid U.S. investment turned copper into the leading export sector of Chile's economy, just in time to replace the loss of the nitrate export sector after the war to a cheaper, synthetic substitute developed by Germany. Furthermore, the effort undertaken by the Chilean structure to meet the internal demand which the industrialized nations at war could no longer satisfy succeeded in dispelling for Chile the feasibility of domestic industrial production.

In summary, the configuration of Chile's urban/regional structure between 1818 and 1930 was clearly influenced by the patterns of production organization and its demand within the primary sector. With labor mobility, expansion of internal communications, growth of national economic institutions, and population increase, urban/regional patterns of economic activity became more diversified in nature and location.

In the Northern Interregional System, and despite the arid nature of its climate and topography, urbanization spread rapidly into the interior with a network of towns developing around mining centers. In the Central Interregional System, the growth of small urban clusters and a host of semi-urban and rural nuclei around agricultural and mining centers increased manifold, bound together by a continuous and easily accessible intercommunication network.

Finally, although the Southern Interregional System lacked the kind of primary resources that would have made the area more attractive for settlement and urban development, control and extension of

national sovereignty over this System dictated the opening of the area for occupation and settlement.

The Stage of Incipient Industrialization and Stagnation (1930-1973)

The external vicissitudes of both the 1930 Great Depression and World War II shook the Chilean export economy to its foundation. The state's inability to import industrial goods and elaborated products for consumption painfully exposed to the country the hazards inherent to an export economy. The inability to import also pointed at the need to reduce the country's dependence on industrialized nations for imports and the necessity to domestically produce imported goods.

At this point, the move toward the substitution of import could not have occurred a a more propitious time. The rapid pace of urbanization attained in the early 1900's spurred the emergence of a multisectoral middle sector and a relatively large wage-earning working class. By 1930, Chile had at its disposal not only a sizable urban population but also a well-consolidated middle class and organized labor wielding sufficient wealth and potential resource skill to carry through the task of mobilizing internal forces. The emergence of the middle-class political party, the Radical Party, articulated the interests of this class and became the key force in the shift from an export to an import-substitution economy.

The net effect of the shift to import substitution was the initiation of an era of active industrialization or "inwardly-oriented" stage of economic growth characterized by a relative decrease in mining and agriculture and a simultaneous increase in manufacturing and service activities. Certainly, a production index computed by Davis and

Ballesteros with base 1929 = 100 reveals that as early as 1934 the industrial sector was producing more goods than in 1929. By the end of World War II the industrial output index had climbed to 246, and by 1953 to 313, the year in which the inflation-ridden Chilean economy began stagnating. Meanwhile, between 1929 and 1953, mining production had decreased somewhat in absolute terms, and agricultural output had lagged behind the growth of population.[13] The drastic contraction of the agricultural and mining export activity caused in turn a functional transfer in the relative importance of national income generation from one sector of the economy to another, as shown in Table III-5.

TABLE III-5

The Contribution of Sectoral Production to the Generation of National Income

Years	Mining	Agriculture	Industry & Construction	Other
1925-29	32.5	19.2	13.8	39.6
1948-52	11.9	16.7	21.7	49.2

SOURCE: Bitran Viveros, "El Papel del Comercio Exterior en el Desarrollo Económico Chileno," cited in Aníbal Pinto, Chile. Un Caso de Desarrollo Frustrado, (Santiago: Editorial Universitaria, 1959), p. 115.

The greatest proportional increase in national income generation was in government, due largely to the growth of public administration, and in public utilities. With public services increasing nearly five-fold, the combined output of these sectors rose 37 percent during the 1929-51 interval.[14] Manufacturing ranked second. It was mostly con-

[13]Marta A. Ballesteros and Tom E. Davis, "The Growth of Output in Basic Sectors of the Chilean Economy, 1908-1957," Economic Development and Cultural Change, 11 (Jan., 1963), pp. 152-176.

[14]Davis and Ballesteros, op. cit., pp. 168-169.

centrated on the production of import substitutes in four major industrial sectors, namely food, clothes and shoes, furniture, and metal products. These four industrial concerns accounted for between 71 and 75 percent of the labor force of the manufacturing industry.[15]

From an urban/regional point of view, the strategy of industrialization by the state-protected substitution of imports conferred a renewed impetus to the historical trend toward increased population crowding and high density of settlement and economic activity on a certain number of urban centers. The immediate effect of the industrialization process was to locate industrial concerns in the same places where, previously, the financial, commercial and agrarian wealth had historically concentrated, i.e., the urban centers of central-north Chile in the Central Interregional System. This was due to at least two factors.

1. The strong dependence of the import-substitution industry on a steady supply of skilled and sometimes highly-qualified labor rendered industrial localization a highly selective process. Consequently, the urban centers historically attractive to populations ranked high when their demographic-urbanization-education indicators comprised the central parameters governing industrial localization priorities, regardless of the distance to the sources of raw materials.

2. Increasing public support for higher levels of state participation in the unfolding of the import-substitution economy through greater public spending and more favorable policies to industrial growth. It reinforced the need for industrial entrepreneurs to

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[15]James Petras, Political and Social Forces in Chilean Development, (Berkeley, Cal.: University of California Press, 1969), p. 10.

establish an order of priorites for site preferences; in this case, proximity to and access to centers of national decision-making capacity.

These two factors, in combination with accelerated rates of urban population growth, especially since the 1950's, sustained moderate to high rates of urban expansion in cities possessing the appropriate range and incidence of those variables essential to the development of the import-substitution industry. As such, urban growth tended to concentrate in a few areas, i.e., in areas where economic growth was in progress. As a result, these areas tended to grow and develop at stepped up rates, surpassing the growth rates of others. Hence the culmination of a historical process leading to the formation of an interacting and differentiated system and sub-systems of labor markets and wage differentials revolving about a major city. Hence, too, a further stimulus to the pattern of urban-rural and interregional imbalances in the distribution of resources and activities.

No urban center in Chile was in a better position to meet the specifications for import-substitution industrial localization than Santiago, the capital city. The seat of national power and the decision-making apparatus, it not only contained an abundant supply of manpower--22.6 percent of the total population already lived in Santiago in 1936[16]--but it also enjoyed broad commercial, technical, and educational connections with most industrialized nations. Of the remaining urban centers, only the seaport cities of Valparafso and Concepción, with comparatively less favorable advantages for industrial localization, could nibble away from Santiago a degree of industrial progress.

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[16]Chile. Instituto Nacional de Estadísticas y Censo. Censo de 1930.

By 1957, Santiago, Valparaíso and Concepción concentrated the larger percentage of industrial enterprises, investment, and labor force, and generated the greater percentage of the national industrial aggregate value. Ten years later, and despite a slight decrease in concentration levels, concentration of the industrial sector in these three urban centers still remained relatively high, especially in terms of "dynamic" industries producing durable goods (see Tables III-6, III-7 and III-8).

The burgeoning of the industrial city encouraged in turn the intensification of the trend toward interregional redistribution of the population. Changes in the share of total population per region between 1952 and 1960 (Table III-9) show that the industrialized and mining areas of Atacama, Valparaíso, Santiago and Concepción experienced gains in population. Santiago's gains contributed almost eighty seven percent of the total.

Relative losses in numbers occurred in those areas nearest to Santiago, Valparaíso and Concepción, all of which had growth rates for total population less than the national average. The intervening variable of distance seems the most likely explanation of the trend in the Southern Interregional System, whose regional population did not decline (Table III-10).

The process of interregional redistribution of the population was not, however, nearly as impressive as was the movement toward urban areas throughout the country. There had been a steady flow from the country to the city since the latter decades of the nineteenth century. Since 1930 onwards, the unfolding of the import-substitution economy plus the concomitant relative and absolute declines in agricultural

and mining production (excluding copper mining) greatly accelerated the rural-to-urban migratory stream. Additional factors contributing to the trend included high rates of rural population growth and high levels of agricultural labor ejection.

Santiago became the main recipient of rural-to-urban and inter-urban migration. In 1920 Santiago's population was 2.3 times that of the second city, Valparaíso-Viña del Mar, but by 1960 this measure of primacy rose to 5.2. In 1960, Santiago's 1.9 million represented more than a quarter of Chile's 7.4 million people. The growth rate of the total population between 1952 and 1960 was 2.7 percent annually; Santiago's was 4.2 percent. The rest of the country minus Santiago was 2.0 percent.[18] Because Santiago's rate of natural growth was the same as the rest of the country, the difference was due to migration.[19]

The rising metropolization of Chile's urban/regional system together with the inability of the rural areas to weather the impact of the urban-industrial economy marked an accentuation on the dependence of the country on the city to sustain a measure of development. However, the inability of the agricultural sector to adjust its structure to changing situations had become the keynote of Chile's agriculture since the demise of the golden era of wheat exports in the 1870's.

The movement to the city therefore was not the culminating consequence of economic growth but the corollary to the process of stagnation that dated back to the 1870's. As such, internal migration

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[18]Chile. Instituto Nacional de Estadísticas y Censo. Censuses of 1952 and 1960.

[19]Bruce Herrick, Urban Migration and Economic Development in Chile, (Cambridge, Mass.: M.I.T. Press, 1965), p. 44.

succeeded in relocating rural marginality into urban marginality. The latter occurred when the import-substitution industry proved unfit to employ rural migrants due to the emphasis of import substitution on high and fast return per unit of capital invested rather than on unit of labor investment. The rural migrant came then to swell the ranks of the unemployed and underemployed alike as well as those of the tertiary sector. In James Petras' words:

> In Chile, between 1940-1954, while employment in industry increased from 13.2 to 16.7 percent of the economically active population, personal services increased from 15.1 to 20.5 percent. Within the "service" sector as a whole, personal services absorbed the largest proportion of the rural migrant, in the face of industry's very limited ability to do so.[20]

Localized industrialization and urbanization did have a beneficial side-effect on the much-slower process of rural development, albeit not sufficiently intense to offset the overwhelming influence of the ongoing process of urban-industrial development. Penetration of urban modes of market production into the countryside of the Central Interregional System stimulated further growth of those semi-urban and rural communities enjoying locational advantages with regards to the transport and communications lanes among main population, consumption and production centers.[21] The ensuing "intermediary" type of economic activities that powered the dynamics of these areas transformed them into centers of attraction for neighboring populations reflected in the ability to develop commercial and service activities and, sometimes, a subsidiary

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[20]Petras, op. cit., p. 15.

[21]About seven Chilean cities have had their origin thanks to their "on the road" locational advantages. Such is the case of Los Andes, on the Santiago-Mendoza (Argentina) road; Chonchi, on the lumber and agricultural trade routes of Chiloé island; La Calera, San Bernardo, and Los Lagos, on the North-South railroad junctions; and Nogales, on the Pan-American highway.

industrial operation.

The town of Casablanca in Region V illustrates this point, Established in 1793 as a resting outpost on the Santiago-Valparaíso road, it lost much of its importance to the Santiago-Valparaíso railroad completed in 1861. The railroad diverted passenger and freight flows to the town of La Calera, north of Casablanca.

Paving of the old Santiago-Valparaíso road in 1930 restored Casablanca some of its past relevance, to lose it again, partially, in 1961 to a modern highway that bypasses the town. Yet, in the meantime, Casablanca grew to a small-size urban center (1970 population: 12,305). At the same time, the favorable location of Casablanca between two of the larger urban centers in the nation, Santiago and Valparaíso, helped the town to develop a succesful commercial and service activity that culminated in 1965 with the establishment of an automobile assembling plant.

On the whole, the overall policy of limited gains in industry at the expense of other sectors of the economy, accompanied by a sluggishness in key economic sectors and by a regressive type of income distribution that worked against the lower-income groups,[22] generated a state of economic stagnation since the early 1950's characterized, according to

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[22]Per capita national income redistribution away from the wage workers is documented in a study reported by the Instituto de Economía of the University of Chile as follows:

	Group as a Whole		Income per Person Employed			
	1953	1959	1953		1959	
			1959 $	Index	1959 $	Index
Wage workers	30.0	25.5	520.0	100	512.0	98.5
Salaried Employees	26.4	25.2	2596.0	100	2638.0	101.6
Employers	43.6	49.3	6431.0	100	8213.0	127.7
	100.0	100.0				

SOURCE: La Economía de Chile en el Período 1950-1963. Vol. I, no. 60, p.116.

Petras, by:

> ....the declining ability of industry to provide employment opportunities, especially in terms of urban economically active population; declining or low rates of per capita food production output; mushrooming of a low productive service sector; and decline in industrial exports while imports increase.[23]

The important point of the record on economic stagnation, however, did not lie so much in the conspicuous features of such economic phenomenon as it did in some of the costly social consequences derived from its effects. This becomes specially important when considering that the process of economic stagnation began at the very moment when the nation was entering into a trend of galloping natural population growth and urban expansion, as can be seen in Tables III-3 and III-10.

Urban-rural and interregional variations in standards of living became glaring, as indicated in Table III-11. Whereas 73 percent of urban dwellings had running water in 1960, only 38 percent of urban houses possessed it. There was electricity in 83 percent of urban dwellings, but only in 19 percent of rural dwellings. Bathrooms were installed in 54 percent of urban dwellings, but only in 8 percent of rural houses.[24]

Interregional disparities in standards of living were as dramatic. The census of 1952 identified dwellings "which should be replaced because they are in a bad state of conservation". The housing deficit thus defined was over 25 percent in six of the country's twenty-five provinces; by 1960, five additional provinces were added to this

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[23]Petras, op. cit., p. 12.

[24]Armand Mattelart, Integración Nacional y Marginalidad, (Santiago, 1965), p. 150 (urban areas); p. 139 (rural areas).

measure of housing deficit. In regards to urban amenities, nineteen provinces scored below the national average of dwellings with running water, electricity, and sewage disposal in the censuses of 1952 and 1960.

Increasing awareness of urban-regional imbalances in population, activity and welfare provided the intellectual and political elites a point of departure for an interpretation of Chile's underdevelopment, namely the theories of "structuralism" and "dependency", which are discussed in Chapter VI. In the light of these theories, both the Christian Democrat Eduardo Frei, elected President of Chile for the 1964-70 term, and Marxist Salvador Allende (1970-73) embarked the country on far-reaching social and economic reforms, particularly in education and agrarian reform. More significantly, they were the first in introducing conscious attempts at economic planning both at the national intersectoral level and at the regional level.

The record of economic stagnation, soaring inflation, indebtedness, and, during Allende's administration, social instability, remained resistant to any efforts at solution. Finally, on September 11, 1973, Chile's political system collapsed under the strain, bringing on the military junta that has ruled Chile since that date.

By the time of the institutional collapse, the observed cumulative effect of the historical process of national transformation and its simultaneous process of urban/regional configuration had created in Chile a highly differentiated scheme of spatial and socio-economic relationships which are summarized in Table III-12.

Summary

In retrospect, the foregoing characterization of Chile's urban/-regional structure allows a deeper elaboration on the idea that the historical process of consolidation of the country's urban/regional system was partly dependent on variations in the national and international economic fabric and partly dependent on the environmental features of the national territory.

It may be stated that a number of variables condition the comparative advantages possessed by a given city/region at both the regional and national levels. At the regional level, these variables are defined in terms of geographic location, resource endowment, factors of production, and accessibility. Their differential magnitude quantitatively and qualitatively represents the city/region's comparative advantage vis-á-vis other city/regions also bidding for the satisfaction of national developmental goals. These goals in turn, as conceptualized by the leading political elite, define the variables that determine, at the national level, which urban/regional comparative advantages are in demand.

The changing behavior of these variables through time acts as a framework of constraints capable of sustaining changes of structure, direction, and rates of growth on a given urban/regional system. The development and consolidation of imbalances in the urban/regional system is therefore the consequence of policies which stimulate the localization of population and activity in selected city/regions. Selective localization, on the other hand, is also caused by the comparative advantages present in a given city/region for the implemen-

tation of national development goals.

In the specific case of Chile, the asymmetrical nature of her urban/regional system reflects a gradual accumulation of negative and positive factors resulting from economic and political motivations originating at the primate center. Within this context, the perceived scheme of spatial and socio-economic relationships is one of polarization rather than integration. Population and urbanization trends since 1895 give support to this conclusion

Primacy, as measured by the rank-size rule,[25] increased throughout the 1895-1970 interval, particularly in the 1930-60 period (Table III-13). The only occasion in which Santiago's rate of growth was exceeded by another city's rate of population growth occurred in the decades between 1895 and 1930 (Table III-14). Antofagasta's comparative advantages to national developmental goals derived from nitrate and copper mining elicited positive responses from the national ruling elite at the primate center and secured a substantial resource flow from it. The positive interaction between Santiago and Antofagasta paved the way for migration to Antofagasta. As a result, the 1895 population of Antofagasta grew 296 percent by 1930, or a growth rate of 4 percent per annum.

Temuco's growth, on the other hand, is the reverse of Antofagasta's

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[25]The Zipf city- or rank-size distribution states that the cities of a country, when ranked in descending order of population size, will be related to each other such that the population of the r^{th} ranking city will be $1/r^{th}$ the size of the largest city. This has been called the rank-size rule. If this function is plotted in doubly logarithmic scale, it will form an approximately straight line. Such distribution of cities has therefore been called log-normal. See Brian J. L. Berry and F. E. Horton, Geographic Perspectives on Urban Systems, (Englewood Cliffs, N. J.: Prentice-Hall, 1970).

growth. Located in the heart of the wheat country, Temuco's growth also superseded Santiago's growth in the 1895-1930 interval. The collapse of the wheat boom in the 1870's coupled with a semi-feudalistic organization of land ownership stirred up rural migration to Temuco. As a result, Temuco's 1895 population increased 377 percent by 1930, or a rate growth of 4.6 percent per annum.

Temuco's experience illustrates a case of comparative advantages that could no longer satisfy national developmental goals. Temuco therefore drew negative responses from the national ruling elite at the primate center and no significant resource transfers between Santiago and Temuco occurred.

From 1930 to 1960, Santiago's pace of growth became unsurpassed, firmly establishing its primacy over the next four largest cities.[26] Import substitution was now the national developmental goal and Santiago's comparative advantages for import-substitution industry were difficult to match elsewhere.

Concepción's growth was also stepped up. Here, the region's coal resources needed for the development of the steel industry, a basic component of the import-substitution economy, provided Concepción's foremost comparative advantage. On the other hand, proximity to Santiago seems to explain Valparaíso's slow-down in growth. Similarly, increased rates of out-migration accounts for Temuco's decline.

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[26] Estimates of population growth and distribution in 1977 done by the Instituto Nacional de Estadísticas (INE) show that Santiago remains the fastest growing city in the country. The city concentrated over one-third of the national total population. See El Mercurio, September 13, 1977.

In the 1960's, except for the modest expansion of Valparaíso, Santiago, Concepción, Antofagasta and Temuco rose markedly their rates of growth. The factors which contributed to the rise of growth rates included increased demand for mining commodities from Antofagasta, intensified agglomeration of import-substitution activity in Santiago and Concepción, and the introduction of forestal, meat-packing and services to agriculture activities in Temuco.

It is interesting to note that, as shown in Table III-15, these five cities have consistently grown faster than the national average, first from 1895 to 1952 and again in the 1960's. The latter may be an indication of a trend toward either greater national concentration of urban growth, a higher degree of primacy, or greater concentration of the largest cities.

Whatever the outcome of such a trend may be, one may reach the following conclusion based on the degree of influence that variations in the central variables of the national economy have on urban/regional growth. The conclusion is that to change the direction and intensity of existing trends in urban/regional growth and associated patterns of imbalances in population, economic activity and welfare, the direction and intensity of urban/regional growth determinants have to be modified.

This conclusion raises the question of what constitutes an urban/-regional growth determinant. Basically, urban/growth determinants are the factors which place some regions and cities at a disadvantage to others within the same country. Chapter II reviewed the geographic urban/regional growth determinants, while the present Chapter examined the socio-political and economic ones as expressed in the concept of

comparative advantages to meet national developmental goals. To change their direction and intensity requires a policy of urban/regional development capable of redirecting these factors toward the modification of existing trends and patterns in the country's urban/regional system, the amelioration of imbalances in the distribution of resources and activities, and geared to the central objectives of economic growth and modernization. Such is the intent of the Regional Development Act of 1974.

Before discussing the Regional Development Act of 1974, two additional urban/regional growth determinants merit attention to complete an appreciation of the problems that warranted the formulation of the Regional Development Act of 1974. They are "urbanization" and "population", the subject of Chapter IV.

TABLE III-1

CITY FOUNDATION IN CHILE, 1541-1818

REGION	PROVINCE	CITY	YEAR OF FOUNDATION XVI c.	XVII c.	XVIII c.	1970 Population	Origin or Reason Underlying its Foundation
I	Tarapacá	Iquique	1556			65,040	Mining center
		Arica	1570			92,338	Old Indian Settlement
II	Antofagasta						
III	Atacama	Copiapó			1744	51,893	Mining center
		Freirina			1755	5,530	Mining center
		Vallenar				41,955	Mining center
IV	Coquimbo	La Serena	1549			72,154	Government-Administrative
		Andacollo		1668		10,026	Religious center
		Illapel			1788	20,756	Mining center
		Combarbalá			1790	17,331	Mining center
V	Aconcagua	San Felipe			1740	34,343	Government-Administrative
		Petorca			1754	8,350	Mining center
		La Ligua			1790	16,046	Mining center
		Los Andes			1791	30,565	Road outpost
	Valparaíso	Valparaíso	1552			255,286	Seaport
		Casablanca			1753	12,305	Road outpost
M.R.	Santiago	Santiago	1541			2,745,158[1]	Government-Administrative
		Melipilla			1742	49,373	Old Indian Settlement
		Alhué			1752	5,101	Mining center
		San José de Maipo			1792	9,107	Mining center
VI	O'Higgins	Rancagua			1743	94,830	Old Indian Settlement
		San Vicente			1786	28,383	Old Indian Settlement
	Colchagua	San Fernando			1792	44,443	Government-Administrative
		Peumo		1630		11,299	Old Indian Settlement
VII	Curicó	Curicó			1742	38,673	Government-Administrative
	Talca	Talca			1742	102,815	Former religious convent
		Curepto			1755	13,075	Agricultural center
	Maule	Cauquenes			1742	38,673	Agricultural center
		Constitución			1794	23,612	Seaport; Seaside resort

TABLE III-1 (Cont.)

REGION	PROVINCE	CITY	YEAR OF FOUNDATION XVI c.	XVII c.	XVIII c.	1970 POPULATION	ORIGIN OR REASON UNDERLYING ITS FOUNDATION
VII	Linares	San Javier			1755	27,586	Agricultural center
		Linares			1794	61,395	Agricultural center
		Parral			1795	30,420	Agricultural center
VIII	Nuble	Chillán	1580			103,111	Government-Administrative
		Quirihue			1749	9,907	Agricultural center
		San Carlos			1800	31,371	Agricultural center
	Concepción	Concepción	1551			189,429	Government; military outpost
		Coelemu			1750	12,646	Agricultural center
		Talcahuano			1764	152,755	Seaport
		Yumbel			1766	21,906	Religious center
	Bío-Bío	Los Angeles			1739	90,239	Agricultural center
		Nacimiento			1756	17,665	Military outpost
	Arauco	Cañete	1557			19,957	Military outpost
IX	Malleco	Angol	1553			34,653	Military outpost
		Purén	1553			11,634	Military outpost
	Cautín	Imperial	1551			30,347	Military outpost
		Carahue	1551			13,371	Military outpost
		Villarrica	1552			23,929	Military outpost
X	Valdivia	Valdivia	1552			92,124	Government; military outpost
	Osorno	Osorno			1794	68,815	Government-Administrative
	Llanquihue	Calbuco		1602		21,797	Military outpost
	Chiloé	Castro	1567			22,829	Military outpost
		Chonchi			1764	8,937	Road outpost
		Ancud			1794	23,103	Military outpost

SOURCES: Pedro Cunill, Geografía de Chile, (Santiago: Editorial Universitaria, 1965)
Luis Galdames, A History of Chile, (New York: Russell & Russell, 1964)

[1]It includes the following incorporated areas: Santiago, Conchalí, Providencia, Ñuñoa, la Reina, Maipo, Las Condes, Quinta Normal, la Florida, San Miguel, la Granja, la Cisterna, Puente Alto, Pirque, Renca, Quilicura, and Barrancas.

TABLE III-2

CITY FOUNDATION IN CHILE, 1818-1930

REGION	PROVINCE	CITY	YEAR OF FOUNDATION XIX c.	YEAR OF FOUNDATION XX c.	1970 POPULATION	Origin or Reason Underlying its Foundation
I	Tarapacá	Pisagua	1836		317	Seaport; mining center
II	Antofagasta	Taltal	1852		7,438	Mining center; seaport
		Tocopilla	1865		22,241	Mining center; seaport
		Antofagasta	1868		126,567	Seaport
		Calama	1868		72,555	Old Indian Settlement
III	Atacama	Huasco	1850		5,000	Mining center
		Caldera	1850		3,363	Seaport
		Chañaral	1884		13,707	Mining center
IV	Coquimbo	Vicuña	1820		13,755	Old Indian Settlement
		Ovalle	1831		53,828	Old Indian Settlement
		Salamanca	1843		18,767	Old Indian Settlement
		Coquimbo	1850		56,964	Seaport
V	Aconcagua	Putaendo	1831		12,723	Mining center
	Valparaíso	Limache	1829		22,574	Old Indian settlement
		Viña del Mar	1874		188,811	Sea resort
		Llay-Llay	1878		14,102	Mining center
		Quintero		1900	11,845	Seaport
M.R.	Santiago	Talagante	1833		23,526	Old Indian settlement
		San Bernardo	1834		118,797	Agricultural center
		Buín	1844		31,463	Agricultural center
		San Antonio	1848		54,380	Seaport
VI	O'Higgins	Rengo	1825		28,290	Former religious convent
	Colchagua	Santa Cruz	1850		19,295	Agricultural center
VII	Curicó	Vichuquén	1865		4,357	Old Indian settlement
	Talca	Molina	1834		31,061	Agricultural center
	Maule	Chanco	1872		12,453	Agricultural center

TABLE III-2 (cont.)

REGION	PROVINCE	CITY	YEAR OF FOUNDATION XIX c.	YEAR OF FOUNDATION XX c.	1970 POPULATION	Origin or Reason Underlying its Foundation
VIII	Concepción	Tomé	1835		44,737	Seaport
		Lota	1841		51,646	Mining center
		Coronel	1865		76,010	Mining center
		San Rosendo	1872		14,337	Road outpost
	Ñuble	Bulnes	1839		16,170	Agricultural center
		Yungay	1842		10,699	Agricultural center
	Arauco	Arauco	1852		19,957	Mining center
		Lebu	1862		23,526	Mining center
		Curanilahue	1880		21,184	Mining center
	Bío-Bío	Mulchén	1862		23,526	Military outpost
IX	Malleco	Collipulli	1874		15,065	Military outpost
		Traiguén	1878		20,890	Military outpost
		Victoria	1881		28,530	Military outpost
		Curacautín	1882		15,924	Military outpost
	Cautín	Lautaro	1881		26,140	Military outpost
		Temuco	1881		146,121	Military outpost
		Loncoche		1900	5,556	Agricultural center
		Pitrufquén	1897		16,713	Military outpost
X	Valdivia	La Unión	1827		32,041	Agricultural center
		Río Bueno	1845		28,473	Agricultural center
		Los Lagos	1890		15,964	Road outpost
		Corral		1900	5,556	Seaport
	Osorno	Río Negro		1924	15,740	State-sponsored settlement
	Llanquihue	Puerto Montt	1853		87,269	State-sponsored settlement
		Puerto Varas	1854		20,995	State-sponsored settlement
		Maullín	1866		14,616	Military outpost
XI	Aysén	Puerto Aysén		1908	13,476	State-sponsored settlement
XII	Magallanes	Punta Arenas	1843		65,651	State-sponsored settlement
		Porvenir	1894		3,606	Mining center
		Puerto Natales		1910	13,695	State-sponsored settlement

SOURCE: Pedro Cunill, Geografía de Chile, (Santiago: Editorial Universitaria, 1965)

TABLE III-3

URBAN AND RURAL POPULATION, 1875-1976

CENSUS YEAR	TOTAL POPULATION	URBAN			RURAL		
		POPULATION (TH.)	%	GROWTH RATE	POPULATION (TH.)	%	GROWTH RATE
1875	2219.2	599.2	27.0		1620.0	73.0	
				2.44			.66
1885	2491.9	762.5	30.6		1729.4	69.4	
				3.40			.05
1895	2804.3	1065.6	38.0		1738.7	62.0	
				2.27			.45
1907	3228.6	1394.7	43.2		1833.8	56.8	
				1.68			.67
1920	3731.6	1732.6	46.4		1999.0	53.6	
				2.03			.82
1930	4287.5	2119.2	49.4		2168.2	50.6	
				1.93			.68
1940	4885.0	2564.6	52.5		2320.4	47.5	
				2.54			.52
1952	5933.0	3464.9	58.4		2468.1	41.6	
				5.06			-.07
1960	7477.1	5144.1	68.2		2333.0	31.2	
				2.64			-.10
1970	8880.9	6675.1	75.1		2205.8	24.9	
				3.54			1.64
1976	10454.4	8226.8	78.7		2227.6	21.3	

SOURCE: INE, Censuses 1875 to 1970
United Nations Demographic Yearbook, 1976, p. 150 (1976 figure)

TABLE III-4

GROWTH OF REGIONAL CAPITAL CITIES, 1895-1970

REGION	CITY	1895	1930			1960			1970		
		POPULATION (TH.)	POPULATION (TH.)	% OF CHANGE	GROWTH RATE	POPULATION (TH.)	% OF CHANGE	GROWTH RATE	POPULATION (TH.)	% OF CHANGE	GROWTH RATE
I	Iquique	33,031	46,458	40.65	1.0	50,655	9.03	.3	64,477	27.29	2.4
II	Antofagasta	13,530	53,591	296.09	4.0	87,860	63.95	1.7	125,086	42.37	3.6
III	Copiapó	9,301	10,747	15.55	.4	30,123	180.29	3.5	45,194	50.03	4.1
IV	La Serena	15,712	20,696	31.72	.8	40,854	97.40	2.3	61,897	51.51	4.2
V	Valparaíso	133,098	242,693	82.34	1.7	368,332	51.77	1.4	439,169	19.23	1.8
M.R.	Santiago	265,403	696,231	162.33	2.8	1,907,378	173.96	3.4	2,850,000	49.42	4.1
VI	Rancagua	6,665	23,339	250.17	3.6	53,318	128.45	2.8	86,404	62.05	4.9
VII	Talca	33,232	45,020	35.47	.9	68,148	51.37	1.4	94,449	38.59	3.3
VIII	Concepción	50,268	105,183	109.24	2.1	231,687	120.27	2.7	323,834	31.77	3.4
IX	Temuco	7,078	33,748	376.80	4.6	75,132	122.63	2.7	11,335	46.85	3.9
X	Puerto Montt	3,480	16,150	364.08	4.5	41,681	158.09	3.2	67,726	50.49	5.0
XI	Punta Arenas	3,227	24,307	653.24	5.9	49,504	103.66	2.4	61,813	24.86	2.2

SOURCE: INE, Censuses 1895 to 1970

TABLE III-6

CHILE'S INDUSTRIAL SECTOR, 1957-1967

REGION	PROVINCE	NEW INVESTMENT				INDUSTRIAL ENTERPRISES				INDUSTRIAL LABOR FORCE			
		1957 (Th. 1967 $)	%	1967 (Th. 1967 $)	%	1957 (# Enterp.)	%	1967 (# Enterp.)	%	1957	%	1967	%
I	TARAPACA	2,195.3	.7	25,694.1	3.5	76	1.3	190	1.7	1,889	.9	9,022	2.7
II	ANTOFAGASTA	2,635.8	.8	13,637.8	1.8	127	2.2	153	1.3	2,642	1.3	6,723	2.0
III	ATACAMA	3,875.5	1.2	77.3	.1	51	.9	76	.7	768	.4	1,733	.5
IV	COQUIMBO	1,982.1	.6	1,189.3	.2	95	1.6	214	1.9	1,656	.8	4,012	.2
V	ACONCAGUA	1,414.5	.4	2,119.2	.3	81	1.4	172	1.5	2,011	1.0	3,447	1.0
	VALPARAISO	20,058.5	6.4	147,814.2	19.9	596	10.2	802	7.0	23,436	11.3	30,703	9.0
		21,473.0	6.8	149,933.4	20.2	677	11.6	974	8.5	25,447	12.3	34,180	10.0
M.R.	SANTIAGO	110,749.1	35.1	362,568.4	48.8	3,151	53.8	5,238	45.7	125,401	60.7	199,055	58.6
VI	O'HIGGINS	1,634.0	.5	14,678.8	2.0	107	1.8	355	3.1	1,894	.9	4,904	1.4
	COLCHAGUA	41.5	.0	859.7	.1	41	.7	173	1.5	819	.4	2,126	.6
		1,675.5	.5	15,538.5	2.0	148	2.5	528	4.6	2,713	1.3	7,030	2.1
VII	CURICO	155.7	.0	516.1	.1	47	.8	151	1.3	612	.3	1,264	.4
	TALCA	2,486.8	.8	6,135.8	.8	121	2.1	307	2.7	3,606	1.7	5,036	1.4
	MAULE	---	-	4,136.4	.6	24	.4	123	1.1	201	.1	1,142	.3
	LINARES	134.9	.0	2,291.7	.3	61	1.0	290	2.5	923	.4	2,488	.7
		2,777.4	.9	13,080.0	1.8	253	4.3	871	7.6	5,342	2.6	9,930	2.9
VIII	NUBLE	126.4	.0	35,204.3	4.7	113	1.9	370	3.2	1,485	.7	3,794	1.1
	CONCEPCION	160,283.0	50.8	94,070.1	12.7	334	5.9	536	4.7	22,405	.1	34,222	10.0
	ARAUCO	2.8	.0	193.8	.0	13	.2	95	.8	133	.1	719	.2
	BIO-BIO	587.7	.2	4,102.2	.6	62	1.1	232	2.0	1,531	.7	4,069	1.1
		160,999.9	51.0	133,570.4	18.0	522	8.9	1,233	10.8	25,554	12.4	42,804	12.6
IX	MALLECO	237.7	.1	883.6	.1	62	1.1	165	1.4	1,348	.7	2,364	.7
	CAUTIN	859.4	.3	4,231.8	.6	202	3.5	428	3.7	3,043	1.5	4,902	1.4
		1,097.1	.4	5,115.4	.7	264	4.5	593	5.2	4,391	2.1	7,266	2.1

TABLE III-6 (Cont.)

REGION	PROVINCE	NEW INVESTMENT 1957 (Th. 1967 $)	%	1967 (Th. 1967 $)	%	INDUSTRIAL ENTERPRISES 1957 (# Enterp.)	%	1967 (# Enterp.)	%	INDUSTRIAL LABOR FORCE 1957	%	1967	%
X	VALDIVIA	2,370.8	.8	8,479.7	1.1	163	2.8	505	4.4	4,971	2.4	8,877	2.6
	OSORNO	2,084.0	.7	4,330.2	.6	124	2.1	295	2.6	2,214	1.1	3,141	.9
	LLANQUIHUE	267.9	.0	2,650.5	.4	95	1.6	299	2.6	1,666	.8	498	.9
	CHILOE	79.2	.0	919.9	.1	17	.3	106	.9	140	.1	498	.1
		4,801.9	1.5	16,380.3	2.2	399	6.8	1,205	10.5	8,997	4.4	15,634	4.6
XI	AYSEN	1.9	.0	242.3	.0	13	.2	81	.7	140	.1	476	.1
XII	MAGALLANES	1,327.4	.4	4,503.3	.6	78	1.3	113	1.0	1,761	.9	1,948	.6
	CHILE	315,591.9	100.0	743,230.5	100.0	5,854	100.0	11,469	100.0	206,701	100.0	339,813	100.0

SOURCE: ODEPLAN, Subdirección Regional, Unidad Estadísticas Regionales. October, 1974.

TABLE III-7

CHILE'S INDUSTRIAL SECTOR, 1957-1967

INDUSTRIAL AGGREGATED VALUE

REGION	PROVINCE	1957 (TH. 1957 $)	%	1967 (TH. 1967 $)	%
I	TARAPACA	2,108.1	.7	497,376.8	5.1
II	ANTOFAGASTA	4,408.2	1.4	726,737.1	7.5
III	ATACAMA	1,767.5	.6	182,860.8	1.9
IV	COQUIMBO	2,293.4	.8	88,508.8	.9
V	ACONCAGUA	2,341.1	.8	57,918.5	.6
	VALPARAISO	60,062.6	18.8	1,077,524.3	11.1
		62,403.7	20.6	1,135,442.8	11.7
M.R.	SANTIAGO	152,774.2	50.4	4,816,051.1	49.6
VI	O'HIGGINS	4,357.5	1.4	569,392.7	5.9
	COLCHAGUA	925.4	.3	73,098.9	.8
		5,282.9	1.7	642,491.6	6.7
VII	CURICO	527.1	.2	18,902.4	.2
	TALCA	4,369.0	1.4	115,201.3	1.2
	MAULE	141.4	.0	18,537.4	.2
	LINARES	720.2	.2	57,897.5	.6
		5,757.7	1.8	210,538.6	2.2
VIII	NUBLE	1,215.7	.4	68,757.7	.7
	CONCEPCION	44,154.1	14.6	784,614.3	8.1
	ARAUCO	132.5	.0	6,421.9	.1
	BIO-BIO	3,637.2	1.2	140,238.0	1.4
		49,139.5	16.2	1,000,031.9	10.3
IX	MALLECO	1,270.0	.4	20,412.9	.2
	CAUTIN	2,370.2	.8	62,522.3	.6
		3,640.2	1.2	82,935.2	.8
X	VALDIVIA	6,274.7	2.1	136,176.3	1.4
	OSORNO	3,193.5	1.1	70,856.8	.7
	LLANQUIHUE	2,073.5	.7	76,014.1	.8
	CHILOE	51.7	.0	7,812.4	.1
		11,593.5	3.8	209,859.6	3.0
XI	AISEN	79.5	.0	4,950.1	.1

TABLE III-7 (Cont.)

CHILE'S INDUSTRIAL SECTOR, 1957-1967

INDUSTRIAL AGGREGATED VALUE

REGION	PROVINCE	1957 (TH. 1957 $)	%	1967 (TH. 1967 $)	%
XII	MAGALLANES	2,105.3	.7	37,491.9	.4
	CHILE	303,398.7	100.0	9,716,276.3	100.0

TABLE III-8

GEOGRAPHIC CONCENTRATION OF INDUSTRY IN SANTIAGO, VALPARAISO AND CONCEPCION

INDUSTRIAL ACTIVITY		1957 No. Firms	1957 % Firms	1967 No. Firms	1967 % Firms
Traditional	31	813	50.7	1,454	43.7
Traditional	32	1,484	84.5	1,761	86.5
Traditional	33	335	54.6	780	27.2
Basic	34	210	78.9	403	78.6
Basic	35	276	87.6	491	88.9
Basic	36	174	68.8	237	68.5
Basic	37	64	73.6	88	88.9
Dynamic	38	584	71.7	1,184	77.7
Residual	39	141	91.6	178	84.4

SOURCE: ODEPLAN, Censo Nacional Manufacturero, 1957-1967

TABLE III-9 (Cont.)

INTER-REGIONAL AND INTER-PROVINCIAL MIGRATION, 1952-1960

REGION	PROVINCE	1960 POPULATION (TH.)	TOTAL GROWTH (TH.)	GROWTH (TH.)	NET MIGRATION (TH.)	NET MIG/1960 PROVINCIAL POPULATION
X	Valdivia	259.8	24.903	50.297	- 25.394	- 9.77
	Osorno	144.0	20.171	24.323	- 4.152	- 2.88
	Llanquihue	167.7	26.716	31.124	- 4.408	- 2.63
	Chiloé	99.2	- 3.046	16.977	- 20.023	- 20.18
		670.7	68.744	122.721	- 53.977	- 8.05
XI	Aysén	37.8	11.715	8.783	2.932	7.76
XII	Magallanes	73.2	18.260	10.964	7.296	9.97
	CHILE	7,374.1	1,423.535	1,455.378	- 31.843	

SOURCE: CORFO, Geografía Económica, (Texto refundido), Santiago, 1965, p. 375
INE, Censuses of 1952 and 1960.

TABLE III-9

INTER-REGIONAL AND INTER-PROVINCIAL MIGRATION, 1952-1960

REGION	PROVINCE	1960 POPULATION (TH.)	TOTAL GROWTH (TH.)	GROWTH (TH.)	NET MIGRATION (TH.)	NET/1960 PROVINCIAL POPULATION
I	Tarapacá	123.1	19.708	23.592	- 3.884	- 3.16
II	Antofagasta	215.2	29.348	47.195	- 17.847	- 8.29
III	Atacama	116.2	36.757	26.870	9.887	+ 8.51
IV	Coquimbo	309.0	45.436	74.698	- 29.262	- 9.47
V	Aconcagua	140.5	10.789	30.918	- 20.129	-14.33
	Valparaíso	617.5	118.162	113.692	4,470	+ .72
		758.0	128.951	144.610	- 15.659	- 2.07
M.R.	Santiago	2,437.4	688.574	489.810	198.764	+ 8.15
VI	O'Higgins	259.5	33.476	57.578	- 24.102	- 9.29
	Colchagua	158.5	17.792	34.640	- 16.848	-10.63
		418.0	51.268	92.218	- 40.950	- 9.77
VII	Curicó	105.8	15.887	22.304	- 6.417	- 6.07
	Talca	206.2	31.555	39.533	- 7.978	- 3.87
	Maule	79.7	6.891	14.440	- 7.549	- 9.47
	Linares	171.4	24.114	32.580	- 8.466	- 4.94
		563.1	78.447	108.857	- 30.410	- 5.40
VIII	Ñuble	285.6	32.323	51.515	- 19.192	- 6.72
	Concepción	539.5	127.953	121.764	6.189	+ 1.15
	Arauco	89.5	17.028	19.887	- 2.859	- 3.19
	Bío-Bío	168.7	30.012	31.343	- 1.331	- .79
		1,083.3	207.316	224.509	- 17.193	- 1.59
IX	Malleco	174.3	13.133	32.193	- 19.060	-10.94
	Cautín	394.7	25.763	48.360	- 22.597	- 5.73
		569.0	30.896	80.553	- 41.657	- 7.32

TABLE III-10

REGIONAL AND PROVINCIAL POPULATION GROWTH RATES, 1952-1970

REGION	PROVINCE	1952 POPULATION (Th.)	1960 POPULATION (Th.)	GROWTH RATE %	1970 POPULATION (Th.)	GROWTH RATE %
I	Tarapacá	102.8	123.1	2.27	175.1	3.58
II	Antofagasta	184.8	215.2	1.92	251.6	1.57
III	Atacama	80.1	116.2	4.76	152.8	2.77
IV	Coquimbo	262.2	309.0	2.07	339.4	.94
V	Aconcagua	128.4	140.5	1.13	161.5	1.40
	Valparaíso	498.3	617.5	2.71	736.8	1.78
		626.7	758.0	2.41	898.3	1.71
M.R.	Santiago	1755.0	2437.4	4.19	3235.2	2.87
VI	O'Higgins	224.6	259.5	18.2	306.4	1.67
	Colchagua	139.5	158.5	1.60	168.5	.61
		364.1	418.0	1.74	474.9	1.28
VII	Curicó	89.4	105.8	2.12	114.7	.81
	Talca	173.7	206.2	2.16	232.1	1.19
	Linares	146.3	171.4	1.99	189.1	.98
	Maule	72.2	79.7	1.24	82.8	.38
		481.6	563.1	1.98	618.7	.95

TABLE III-10 (Cont.)

REGION	PROVINCE	1952 POPULATION (Th.)	1960 POPULATION (Th.)	GROWTH RATE %	1970 POPULATION (Th.)	GROWTH RATE %
VIII	Ñuble	251.3	285.6	1.61	316.9	1.04
	Concepción	411.6	539.5	3.44	643.8	1.78
	Arauco	72.3	89.5	2.70	98.7	.98
	Bío-Bío	138.3	168.7	2.51	193.5	1.38
		873.5	1083.3	2.73	1252.9	1.45
IX	Malleco	159.4	174.3	1.12	175.3	.05
	Cautín	365.1	394.7	.97	421.0	.64
		524.5	569.0	1.02	596.3	.45
X	Valdivia	232.6	259.8	1.39	277.8	.67
	Osorno	123.1	144.0	1.97	160.1	1.06
	Llanquihue	140.0	167.7	2.28	198.8	1.71
	Chiloé	100.7	99.2	.18	111.1	1.13
		596.4	670.7	1.48	747.9	1.10
XI	Aysén	26.3	37.8	4.63	48.4	2.50
XII	Magallanes	35.1	73.2	3.40	89.5	2.03
	CHILE	5933.0	7374.1	2.70	8880.9	1.87

TABLE III-11

REGIONAL DISTRIBUTION OF SUB-STANDARD HOUSING IN CHILE (PERCENTAGES)

REGION	PROVINCE	Population in Sub-Standard Housing		Houses with Piped Potable Water		Housing with Electric Lighting		Housing Without Piped Sewage Disposal	
		1952	1960	1952	1960	1952	1960	1952	1964
I	Tarapacá	15.8	17.6	50.1	56.4	68.4	70.4	45.3	44.8
II	Antofagasta	12.5	11.2	55.9	69.4	75.0	79.8	36.8	37.0
III	Atacama	29.8	21.5	39.8	44.3	46.2	60.8	67.6	60.1
IV	Coquimbo	41.3	27.5	27.8	29.5	30.5	39.9	75.4	61.0
V	Aconcagua	21.7	19.5	39.5	42.9	47.1	58.7	71.4	64.0
	Valparaíso	13.9	12.4	60.4	71.3	75.1	82.3	32.4	33.1
M.R.	Santiago	15.9	16.6	73.3	78.4	80.2	87.5	35.9	38.0
VI	O'Higgins	15.2	17.5	24.3	32.8	47.1	64.1	73.6	68.2
	Colchagua	17.1	23.2	16.1	19.6	26.2	44.2	86.8	64.1
VII	Curicó	16.6	26.5	28.2	29.9	35.4	50.7	74.3	70.5
	Talca	17.6	23.4	35.2	38.3	39.0	53.8	38.9	64.4
	Maule	18.1	17.3	31.6	35.8	24.6	32.2	78.2	76.7
	Linares	20.7	34.0	23.8	25.6	23.7	33.6	82.3	76.1
VIII	Nuble	23.6	31.3	22.8	26.7	23.0	32.9	83.1	75.5
	Concepción	20.9	26.0	56.1	54.6	60.8	67.8	53.8	53.3
	Arauco	26.5	32.7	19.5	26.9	28.6	38.4	92.9	71.8
	Linares	20.7	34.0	23.8	25.6	23.7	33.6	82.3	76.1
IX	Malleco	27.7	34.1	25.4	32.9	30.1	36.0	83.1	78.8
	Cautín	27.6	31.6	19.2	22.2	26.5	32.3	85.5	84.2
X	Valdivia	21.1	23.3	22.0	23.7	32.0	38.7	79.2	78.0
	Osorno	17.7	25.9	23.3	30.9	35.4	45.5	77.6	73.7
	Llanquihue	15.8	22.5	12.2	11.0	26.1	32.7	86.4	81.2

TABLE III-11 Continued

REGION	PROVINCE(S)	Population in Sub-Standard Housing		Houses with Piped Potable Water		Housing with Electric Lighting		Housing without Piped Sewage Disposal	
		1952	1960	1952	1960	1952	1960	1952	1960
X	Chiloé	17.5	27.7	8.7	9.5	11.7	13.0	94.9	96.0
XI	Aysén	20.6	20.7	16.2	27.2	17.8	32.0	94.2	89.8
XII	Magallanes	12.6	4.8	69.2	62.4	74.5	74.9	39.4	37.9
National Average		19.3	21.3	47.9	53.0	54.5	64.5	58.1	54.6

SOURCE: Frederick S. Weaver, Jr., "Regional Patterns of Economic Change in Chile, 1950-1964," Latin American Studies Program, Dissertation Series, (Ithaca, New York: Cornell University Press, 1968), no. 11, p. 224.

TABLE III-12

Stages in the Processes of National Socioeconomic Development
and its Concomitant City/Regional Structuration of the Geographic Space

At the National Level	At the Regional Level
I. Pre-Industrial Stage, 1810-1914	
1. Increasing participation in a scheme of international division of labor through a policy of development formulated in terms strictly economic and "outwardly-oriented."	1. Formation and consolidation of regional units almost autonomous as a result of their external export activities. Internal satisfaction of the socioeconomic needs of their population and expansion of their productive base.
2. Differential phases of development observed through significant variations in the rates of economic growth due to external factors associted to the unstable behavior of the international demand.	2. Flexibility of the physical boundaries of the regional units under the influence of the expansion or contraction changes in their internal process of configuration and consolidation of the geographic space from efforts to broaden their export base, and in agreement with variations taking place in the rates of national economic growth. First manifestations of regional imbalances reflecting differential comparative advantages for economic exchange with external developed economies.
II. Transitional Stage, 1914-1930	
1. Spontaneous industrialization efforts within the "outwardly-oriented" economy as a result of the export crisis of WWI. Industrial output orientated towards the satisfaction of internal purchasing power and unsatisfied demand market.	1. Localization of units of industrial production in urban centers traditionally at the top of the urban hierarchy from their historical accumulation of external economies. Weak interconnections observed between dynamic industrializing regional units and less developed regional units susceptible of being incorporated to the incipient industrial consumer market and/or producing industrial raw materials. First symptoms of a pattern of rural-to-urban migration from agricultural maladjustments.

TABLE III-12 (Cont.)

At the National Level	At the Regional Level
III. Incipient Industrialization, 1930-1953, and Stagnation, 1953-	
1. A stage of "inwardly-oriented" development with industrialization as the leading sector. It seeks to exploit resources for its own needs while cashing in favorable situations in the international market for capitalization purposes.	1. Gradual interconnection of the economic segments of the national geographic space which diminishes isolation among regional units, eases the flow of goods and services, and facilitates the structuration of a dual system of cities and regions joined together by relations of economic dependence.
2. Ad-hoc economic and sectoral policies of development characterized by the channeling of public and private investments towards regional units for the attainment of a national objective strictly socioeconomic. Migratory streams heading for the cities generated by the expansion of the labor market. Consolidation of a pattern of dual economy characteristic of countries or regions of countries undergoing a rapid transition from labor-intensive to capital-intensive technologies.	2. Consolidation of regional imbalances from the agglomerated localization of industrial development in urban centers exhibiting concentrated levels of labor force and nationally-relevant decision making capacity. Emergence of differentiated system and sub-systems of labor markets revolving about a major city with its regional hinterland or a sub-system of cities with their joint region, i.e., city-regionalism.
3. Period of economic stagnation reflecting internal social and economic cleavages. Policy of development based on the acknowledgement of an unbalanced spatial reality in socio-economic terms. It implies an upgrading of the concept of urban-regional development and a reorientation of state investments towards city/-regions comparatively less advantageous in return for greater socioeconomic benefits.	3. Localization of investments and creation of a basic economic structure of subsidies for depressed city/-regions or of low economic growth rates. Localization of industry in stagnated areas so as to stimulate the external economies generated by the subsidized infrastructures with their consequent benefits for the city/regions in question.

TABLE III-13

RANK-SIZE PRIMACY, 1895-1970

YEAR	POPULATION		PRIMACY
	SANTIAGO	VALPARAISO-CONCEPCION	
1895	265.4	233.6	1.14
1930	696.2	453.1	1.54
1960	1907.4	600.0	3.18
1970	2850.0	763.0	3.74

TABLE III-14

GROWTH OF THE FIVE LARGEST CITIES, 1895-1970

YEAR	SANTIAGO		VALPARAISO		CONCEPCION		ANTOFAGASTA		TEMUCO	
	POPULATION (Th.)	GROWTH RATE	POPULATION (Th.)	GROWTH RATE	POPULATION (Th.)	GROWTH RATE	POPULATION (Th.)	GROWTH RATE	POPULATION (Th.)	GROWTH RATE
1895	265.4		133.1		50.3		13.5		7.1	
		2.8		1.7		2.1		4.0		4.6
1930	696.2		242.7		105.2		53.6		33.7	
		3.4		1.4		2.7		117		2.7
1960	1907.4		368.2		231.7		87.9		7511	
		4.1		1.8		3.4		3.6		3.9
1970	2850.0		439.2		323.8		125.1		110.3	

TABLE III-15

GROWTH OF THE FIVE LARGEST AGGREGATED COMPARED TO NATIONAL URBAN GROWTH

YEAR	URBAN POPULATION CHILE	RATE OF GROWTH	POPULATION OF FIVE LARGEST CITIES	RATE OF GROWTH
1895	1065.5		469.4	
		2.0		2.5
1930	2119.2		1131.5	
		1.9		2.6
1940	2564.6		1463.0	
		2.5		3.5
1952	3464.9		2067.0	
		5.1		2.6
1960	5144.1		2670.4	
		3.1		3.7
1970	6986.9		3848.4	

TABLE III-16

POPULATION

Region	Province	Area (Th.Km²)	% Nat'l Area	1952 Pop. (Th.)	%	Density	Index Pop./ Km²	1960 Pop. (Th.)	%	Density	Index Pop./ Km²	1970 Pop. (Th.)	Density	Index Pop. Km²
I	Tarapacá	58.1	7.7	102.8	1.4	1.9	23.8	123.1	1.7	2.1	21.2	175.1	3.01	25.64
II	Antofagasta	125.3	16.6	184.8	3.1	1.5	18.8	215.2	2.9	1.7	17.1	251.6	2.01	17.12
III	Atacama	78.3	10.3	80.1	1.3	1.0	12.5	116.2	1.6	1.6	16.2	152.8	1.95	16.61
IV	Coquimbo	39.6	5.2	262.2	4.4	6.6	82.5	309.0	4.2	7.8	78.8	339.4	8.58	73.08
V	Aconcagua	9.9	1.3	128.4	2.2	12.6	157.5	140.5	1.9	14.2	143.4	161.5	16.36	139.35
	Valparaíso	5.1	.7	498.3	8.4	103.4	1292.5	617.5	8.4	118.3	1194.9	736.8	144.00	1226.58
		15.0	2.0	626.7	10.6	41.8	522.3	758.0	10.3	50.5	510.4	898.3	59.87	509.97
M.R. VI	Santiago	17.7	2.4	1755.0	29.6	100.7	1258.8	2437.4	33.1	158.5	160 0	3235.2	183.00	1558.77
VI	O'Higgins	7.1	.9	224.6	3.8	31.6	395.0	259.5	3.5	36.5	368.7	306.4	43.12	367.29
	Colchagua	8.3	1.1	139.5	2.4	16.6	207.5	158.5	2.2	19.0	191.9	168.5	20.24	172.40
		15.4	2.0	364.1	6.1	23.6	295.5	418.0	5.7	27.1	274.2	474.9	30.84	262.69
VII	Curicó	5.3	.7	89.4	1.5	15.6	195.0	105.8	1.4	20.0	202.0	114.7	21.78	185.52
	Talca	10.1	1.3	173.7	2.9	18.0	225.0	206.2	2.8	20.3	205.1	232.1	22.89	194.97
	Maule	5.7	.8	72.2	1.2	12.8	160.0	79.7	1.1	14.0	1414	82.8	14.3	123.76
	Linares	9.4	1.2	146.3	2.5	14.9	186.3	171.4	2.3	18.1	182.8	189.1	20.68	176.15
		30.5	4.0	481.6	8.1	15.8	197.4	563.1	7.6	18.5	186.5	618.7	20.29	172.83

TABLE III-16

Population - Cont.

Region	Province	Area (Th.Km²)	% Nat'l Area	1952 Pop. (Th.)	%	Density	Index Pop./ Km²	1960 Pop. (Th.)	%	Density	Index Pop./ Km²	1970 Pop. (Th.)	Density	Index Pop. Km²
VIII	Ñuble	14.0	1.9	251.3	4.2	17.7	221.3	285.6	3.9	20.5	207.1	316.7	22.71	193.44
	Concepción	5.7	.8	411.6	6.9	72.2	902.5	539.5	7.3	94.9	958.6	643.8	113.32	965.24
	Arauco	5.2	.7	72.3	1.2	12.6	157.5	89.5	1.2	17.1	172.7	98.7	18.84	160.48
	Bío-Bío	11.1	1.5	138.3	2.3	12.3	153.8	168.7	2.3	15.2	153.5	193.5	17.38	148.04
		36.0	4.8	873.5	14.7	24.3	303.3	1083.6	14.7	30.1	304.0	1252.9	34.80	296.42
IX	Malleco	14.1	1.9	159.4	2.7	11.2	140.0	174.3	2.4	12.3	124.2	175.3	12.44	105.96
	Cautín	18.4	2.4	365.1	6.2	21.0	262.5	394.7	5.4	21.5	217.2	421.0	22.91	195.14
		32.5	4.3	524.5	8.8	16.1	201.7	569.0	7.7	17.5	176.8	596.3	18.35	156.30
X	Valdivia	18.5	2.4	232.6	3.9	11.1	138.8	259.8	3.5	14.1	142.4	277.8	15.04	128.11
	Osorno	9.2	1.2	123.1	2.1	13.6	170.0	144.0	2.1	15.6	157.6	160.1	17.33	147.61
	Llanquihue	18.2	2.4	140.0	2.4	7.6	95.0	167.7	2.3	9.2	92.9	198.8	10.92	93.02
	Chiloé	26.7	3.5	100.7	1.7	4.3	53.8	99.2	1.4	3.7	37.4	111.1	4.16	35.43
		72.6	9.6	596.4	10.1	8.21	102.7	670.7	9.1	9.2	93.3	747.9	10.30	87.73
XI	Aysén	103.6	13.7	26.3	.4	.3	3.8	37.8	.5	.4	4.0	48.4	.47	4.00
XII	Magallanes	132.0	17.4	35.1	.9	.4	5.0	73.2	1.0	.6	6.1	89.5	.68	5.79
	CHILE	756.6	100.0	5933.0	100.0	8.2	100.0	7374.1	100.0	9.9	100.0	8880.9	11.74	100.00

SOURCES: Corporación de Fomento de la Producción, Geografía Económica de Chile, (Santiago, 1965), p. 374 Dirección de Estadística y Censos, XII Censo General de Población y I de Vivienda, (Santiago, April, 1952, I, p. 111; pp. 123-36.

____ Población del País: Características Básicas de la Población, (Censo 1960) Santiago, 1964.

____ Censo de 1970, (Santiago, 1973).

CHAPTER IV

Chile's Urban-Regional Imbalances
The Urbanization and Population Dimension

1. Urbanization. To speak of "urbanization" is only to abstract one aspect from a whole process of demographic change. More precisely stated, the pace of urbanization reflects rising rates of natural increases in the cities, the pull of rural populations from the country toward the city for jobs, welfare services, and social mobility opportunities, and the push because of hunger, land shortages, and stagnant agricultural production.[1]

In the broad and complex field of social issues, few topics have aroused as much controversy among social scientists and planners as the supposed consequences of urbanization on economics, politics and society in general. Two characteristics of urbanization underlie such controversy. One is related to the multi-dimensional nature of the concept of urbanization. Thus, the urban planner or geographer has usually referred to "urbanization" as a type of settlement of spatial concentration of settlement.[2] Urbanization is then viewed as the growth of city population is absolute numbers and as a percentage of the total population, a concept which is also the basis in population censuses to determine a country's urban-rural outlook.

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[1]L. J. Ducoff, "The Role of Migration in the Demographic Development of Latin America," Milbank Memorial Review, 43 (Oct., 1965), no. 4, 197-209.

[2]Brian J. L. Berry and F. E. Horton, Geographic Perspectives on Urban Systems, (Englewood Cliffs, N. J.: Prentice-Hall, 1970). See also Peter Hagget, Location Analysis in Human Geography, (New York: St. Martin's Press, 1966), and Network Analysis in Geography, (New York: St. Martin's Press, 1970).

The sociologist on the other hand has tended to identify urbanization as a "way of life"[3] rather than as a "place of living". As the emphasis here is on attitudes and values toward innovation and change, this is a broader definition of urbanization, one which allows for the existence of rural populations in urban areas and urbanized populations in rural areas.[4]

The economist for his part would rather relate his analysis of urbanization to aspects of interregional, interurban, and urban-rural imbalances,[5] particulary in terms of income distribution, industrial localization, labor force concentration, and the like. His focus is on the distribution of population, resources, and economic activity, a viewpoint widely conceptualized in the so-called "growth poles"[6] and "center/periphery"[7] theories. The political scientist in turn has associated urbanization with specific political processes such as political learning experiences acquired in an urban setting, the rise

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[3]Louis Wirth, "Urbanization as a Way of Life", American Journal of Sociology, 44 (1938), no. 1, pp. 1-24.

[4]Oscar Lewis and Philip M. Hauser, "The Folk Urban Ideal Types", in Philip M. Hauser and Leo F. Schnore, eds., The Study of Urbanization, (New York: Wiley, 1965). See also Oscar Lewis, The Children of Sánchez, (New York: Random House, 1960).

[5]Economic Commission for Latin America (ECLA), "Social Change and Social Development Policy in Latin American", Document E/CN.12/826.

[6]J. R. Lasuén, "On Growth Poles", Urban Studies, 6 (June, 1969), no. 6, pp. 137-161; Francois Perroux, "Note Sur la Notion de Pole de Croissance", Economie Appliquée, 7 (1955), no. 1-2; Jacques Boudeville, Les Spaces Economiques, (Paris: Presses Universitaires de France, 1961).

[7]Gunnar Myrdal, Economic Theory and Underdeveloped Regions, (London: Duckworth, 1959); Raul Prebisch, "Growth, Disequilibrium and Disparities: Interpretation of the Process of Economic Development," Economic Survey of Latin America, 1949. Document E/CN.12/164/Rev. 1. Part I. United Nations Publication. Sales No. 51.II.G.1.

of "middle sectors" and of a proletariat, and "democracy."[8]

A second explanation for the lack of agreement among social scientists over the alleged consequences of urbanization is the difficulty in defining clearly demarcated cause-and-effect relationships. In political science for example, Samuel Huntington asserts that urbanization involves the creation of both stabilizing and disruptive influence on the traditional social and political order; yet Alex Inkeles, Norman Nie, et al., find little evidence that urbanization affects man's political behavior.[9]

The field of economics provides another example. A current polemic is centered on the extent to which internal migration is an effective mechanism for the redistribution of the economy's human resources and the prospects and problems accompanying concentration or dispersion.[10]

Setting aside the diversity of conception on the general consequences of urbanization, the majority of social scientists agree that what is basic to urbanization is the materialization of two quite different processes: one leading to the evolution of a spatial settlement system, the other to the evolution of a socio-cultural system.

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[8]John A. Peeler, Urbanization and Politics, (Beverley Hills, Cal.: Sage Publications, 1977), Vol. 6, no. 01-062.

[9]Samuel P. Huntington, Political Order in Changing Societies, (New Haven: Yale University Press, 1968); Alex Inkeles, "Participant Citizenship in Six Developing Countries", American Political Science Review, 63 (1969), no. 4, pp. 1120-1141; Norman Nie, et al., "Social Structure and Political Participation: Developmental Relationships", American Political Science Review, 63 (1969), no. 2, pp. 361-378.

[10]R. Paul Shaw, Land Tenure and the Rural Exodus in Chile, Colombia, Costa Rica, and Peru, (Gainesville: The University of Florida Press, 1976).

To be sure, urbanization refers to processes that:

> ...incorporate a growing proportion of the total population into urban settlement patterns, giving rise to the city as a basic ecological matrix for social life and production and leading to its expansion, multiplication, and transformation in space;

and,

> ...incorporate a growing proportion of the total population into urban social structures and styles of life and leading to the modification and transformation of these structures into always new configurations.[11]

To speak of urbanization and its related processes however raise several questions, particularly in terms of its political implications. To what extent are the "modification and transformation of urban social structures into always new configurations" and stability in conflict?[12] Does the incorporation of a "growing proportion of the total population into urban settlement patterns" and into "urban social structures and styles of life" interfere with adaptability, i.e., the ability of a system to undergo internal changes as a reflection of changing pressures?[13] To what degree does the rise of the city as a "basic ecological matrix for social life and production

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[11]John Friedmann, "Two Concepts of Urbanization: A Comment", Urban Affairs Quaterly, 1 (1965-66), no. 1, pp. 78-79.

[12]Wayne A. Cornelius, "Urbanization as an Agent in Latin America Political Instability: The Case of Mexico", American Political Science Review, 63 (1969), no. 3, pp. 833-857; Irving Horowitz, "The City as a Crucible for Political Action", in Glenn H. Beyer, ed., The Urban Explosion in Latin America, (Ithaca, N. Y.: Cornell University Press, 1967); Shanti Tangri, "Urbanization, Political Stability and Economic Growth", in John Friedmann and William Alonso, eds., Regional Development and Planning. A Reader, (Cambridge, Mass.: M.I.T. Press, 1964), pp. 382-402.

[13]Edward Shils, Political Development in New States, (New York; Humanities Press, 1964), pp. 7-8. See also S. N. Eisenstadt, Modernization: Protest and Change, (Englewood Cliffs, N. J.: Prentice-Hall, 1966).

help or hinder the attainment of socio-economic and political integration[14] or increased participation in political processes?[15]

No less significant is the shared concern of many scholars and policy planners over the range of problems with which they are confronted in attempting to prescribe suitable modes of growth and development for the city as a "basic ecological matrix for social life and production". Analysis of the ramification of a concept focused on spatial relationships, conflicts between a focus on growth pole urbanization rather than on intergration of metropolitan areas, and efforts to underline the perspective produced by emphasizing social rather than economic models, all suggest the complex dimension of this aspect of urbanization.[16]

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[14]The growth of marginal populations in and around Latin America's larger cities as a result of rural migration is sometimes regarded as an evidence of the lack of integration, especially in terms of material culture such as education, housing, food and health. The city is thought as ill-prepared to receive the migrant, let alone to act as an integrating mechanism. Gino Germani argues that the migrant is exposed to "co-optation by the upper class for its own purpose, ignored by the middle class, and received with suspicion by the lower class." Conversely, Richard Morse praises the innovative responses urban settlers have made under the pressure of city life in the form of "clientage" and "secessionist associations". See Gino Germani, "The City as an Integrating Mechanism", in Beyer, op. cit., and Richard Morse, "Sao Paulo: Case Study of a Latin American Metropolis", in Francine Rabinovitz and Felicity Trueblood, eds., Latin American Urban Research, (Beverly Hills, Cal.: Sage Publication, 1971) Vol. I.

[15]The generalization is that urbanization tends to increase political participation, i.e., voting. See Irving Horowitz, "Electoral Politics, Urbanization and Social Development in Latin America," Urban Affairs Quarterly, 2 (1967), no. 3, pp. 3-35; Aldo Solari, "Impacto Político de las Diferencias Internas de los Países en los Grados e Indicios de Modernización y Desarrollo Económico", América Latina, 7 (1965) no. 1, pp. 5-22. When tested statistically with aggregate data, it seems to be confirmed for Latin America when voting is measured in terms of the total adult population. However, when it is measured in terms of eligible (literate) voters, urbanization has no effect. See Francine Rabinovitz, Urban Development and Political Development in Latin America, Occasional Paper, (Bloomington, Ill.: Comparative Administrative Group, 1967).

[16]Jorge Hardoy and Guillermo Geisse, eds., Latin American Urban

In Latin America, case studies related to the treatment of the theories of "dependency" and "marginality"[17] further illustrate the controversy over urbanization. There is intense disagreement on whether the central problem generated by accelerated urbanization is the integration of migrants and the urban poor,[18] or whether urban development in its present form is a symptom of the contradictions arising from the existing economic and social system, of which dependency and marginality are integral parts.[19]

Research, (Beverly Hills, Cal.: Sage Publications, 1962), Vol. II; Philip Hauser, ed., La Urbanización en la América Latina, (Santiago: UNESCO, 1961).

[17]The concept of "marginality" divides national populations into "marginal" and "integrated" sectors, with the marginal group defined as the economically powerless position of society. The theory contends that public action should be directed at bringing the marginal population into the "modern", i.e., the economically productive sector. A Marxist interpretation to the concept rejects the thesis that the marginal population may be introduced into the modernizing economy under the economic systems normally found in Latin America and argues that a condition of "dependency" would prevent this from happening. The idea is that the marginals are dependent upon national economies which are in themselves dependent upon the economies of the developed countries, and that full-scale change in the internal and external economies of Latin American countries would bring about the elimination of "marginalidad" and "dependencia". See Osvaldo Sunkel, El Subdesarrollo Latinoamericano y la Teoría del Desarrollo, (Mexico City: Siglo XXI, 1971; Aníbal Quijano, Redefinición de la Dependencia y Proceso de Marginalización en América Latina, (Mexico City: 1971); Guillermo Rosembluth, Problemas Socioeconómicos de la Marginalidad y la Integración Urbana, (Santiago: Comisión Económica para América Latina, 1966); Martha Schteingart, Urbanización y Dependencia en América Latina, (Buenos Aires: Ediciones SIAP, 1973).

[18]Carlos Tobar, "The Argentine National Plan for Eradicating Villas de Emergencia", in Hardoy and Geisse, op. cit.; Lowdon Wingo, "Latin American Urbanization: Plan or Process?" in B. J. Friedan and W. W. Nash, eds., Shaping an Urban Future, (Cambridge, Mass.: M.I.T. Press, 1969).

[19]Diego Robles, "Development Alternatives for the Peruvian Barriadas", in Hardoy and Geisse, op. cit.; William Mangin, "Latin American Squatter Settlements: A Problem and a Solution," Latin American Research Review, 2 (1967), no. 3, pp. 65-98; J. C. Turner, "Uncontrolled Urban Settlement: Problems and Policies", in Gerald Breese, The City in Newly Developing Countries, (Englewood Cliffs, N. J.: Prentice-Hall, 1969).

An important source of disagreement in the theories of marginality is the issue of whether increasing demographic concentration in a few cities[20] is convenient for national development,[21] or whether the population should be diverted into more cities spread over a wider area.[22] At this point, it should be pointed out that the concentration of population in major urban centers in Latin America is not only a demographic phenomenon influencing population distribution. It is an historical event as well. The need of the Iberian conquistadors to establish points of contact between the mother country and the resources in the New World created the conditions for the establishment of population centers.[23]

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[20]Objections to the rates and direction of urban growth has provided a number of schemes to deal with the urban problem. They include Hoselitz's "parasitic" versus "generative" cities, Redfield and Singer "orthogenetic" versus "heterogenetic" centers, and "primate" versus "rank-size" city distribution. See Bert F. Hoselitz, "The Role of Cities in the Economic Growth of Underdeveloped Countries", Journal of Political Economy, 51 (1953), no. 3, pp. 195-208; Martin Berkmann, "City Hierarchies and the Distribution of City Size", Economic Development and Cultural Change, 6 (1958), no. 3, pp. 243-248; Robert Redfield and Milton Singer, "The Cultural Role of Cities", Economic Development and Cultural Change, 3 (1955), no. 1, pp. 53-73.

[21]Kingsley Davis and Hilda Golden, "Urbanization and the Development of Pre-Industrial Areas", Economic Development and Cultural Change, 3 (1954), no. 1, pp. 6-24; H. Browning, "Recent Trends in Latin American Urbanization", Annals of the American Academy of Political and Social Sciences, (1958).

[22]Jorge Hardoy, "Urbanization and Urban Reform in Latin America", in Hardoy and Geisse, op. cit.; John Friedmann and Thomas Lackington, "Hyperurbanization and National Development in Chile. Some Hypotheses", Urban Affairs Quarterly, 2 (June, 1967), no. 4, pp. 3-29; Thomas P. A. Borges, "Relationships Between Economic Development, Industrialization, and the Growth of Urban Population in Brazil", in Philip Hauser, ed., Urbanization in Latin America, (New York: International Documents Service, 1961).

[23]Spanish settlements were frequently established with little attention to topographic factors favorable to physical growth. As a result, many contemporary Latin American cities have serious drawbacks to physical expansion in the scale required by their present

Throughout the colonial period, the city was the unit from which the colonizing power radiated and the locus for both governmental and economic operations. It was also the agency and diffusion point of social change from the rural pattern, the receptacle for the highest talent and the most in need and the sole beneficiary of colonial investment resources.[24]

Independence from the Iberian powers in the nineteenth century changed slightly, if at all, the predominance of the Latin American city over the countryside. The development of commercial and industrial activities gravitated toward the city. In the process the city became a magnet for national populations, sometimes above its capacity to employ, feed, service and educate.

Considered in these terms, cities in Latin American were "urban" from the beginning. Significantly, the performance through time of the functions of residential, commercial, administrative and political center often called for increased population agglomeration and high density of settlement and economic activity. Moreover, localization of political power at the capital city orientated much of the urban thrust toward this city. With the exception of Brazil and Ecuador, increased urbanization of the capital city resulted in its emergence

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development. Mexico City and Caracas are foremost. See Claude Bataillon, "La Geografía Urbana de la Ciudad de México," América Latina, 7 (1964), no. 4, pp. 71-88; André Journaux, "Problems du Site et d'Extension à Caracas, Bogota et Quito," L'Information Geographique, 24 (1960), no. 2, pp. 47-55.

[24]Richard Morse claims that the rise of the early South American urban system was culturally determined to a large degree. As he puts it, "one is struck by the considerable correspondence among actual colonizing practice, royal colonizing ordinances, and the philosophy of colonization as articulated by (Juan de) Solórzano and others. Spanish American cities--in their urban form and social structure, in their relations to hinterlands, in their subordination to royal power--reflected the hierarchical, patrimonial order of the large society."

as the nationally dominant, overurbanized center, several times the size of the nearest competitor.[25]

The centralization of population and resources in selected areas of the national territory raises the question of the desirability of such a development. But the problem is how to assess the costs and benefits of alternative methods for dealing with selective urbanization: strengthening the small and medium-size urban areas? concentrating public investment in selected urban areas? establishing new cities in connection with the development of natural resources?[26]

This is precisely the state of affairs in Latin America. All planners agree that the problem of uncontrolled urban sprawl requires imaginative planning and policies to provide for the needs of the agglomerating masses. However, this is not an easy task. Increasing deterioration in living conditions for city populations, unemployment,

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Quoted in John Miller and Ralph Gukenheimer, eds., Latin American Urban Policies and the Social Sciences, (Beverly Hills, Cal.: Sage Publications, 1971), p. 192.

[25]An indication of the power of the metropolitan area with respect to the rest of the nation is illustrated by the following data on Peru's capital city. Lima concentrates 67 percent of the industrial labor, 44 percent of employment in the service sector, 53 percent of commercial employment, 60 percent of industrial production, 98 percent of financial operations, 83 percent of imports, 65 percent of the income from the retail business sector, and 73 percent of the income from the industrial sector. See Oficina Nacional de Planeamiento y Urbanismo. Plan de Desarrollo Metropolitano, Lima-Callao (PLANDEMET), Esquema Director, 1967-1980. Lima, 1967, pp. 27-33.

[26]Benjamin Higgins, "Urbanization, Industrialization, and Economic Development," in Beyer, The Urban Explosion..., op. cit.

scarcety of capital resources, and haavy costs of providing transport, water, sewage and electricity make the urban problem difficult to solve. To make things more complicated, a wretched complement to the problem of formulating rational urban planning policies is that other devleopments do not keep pace with urban growth. Industrialization is a case in point. There is substantial evidence that during recent decades the pace of urbanization has been much faster than the corresponding rate of industrialization would require.

This is in contrast with the Western European experience (especially England and France) where the Industrial Revolution beginning in the eighteenth century acted as a prior mover of urban dynamics.[27] With the feudal or landlord system destroyed, and with competition from factories driving the cottage handicraft industries out of business, large surpluses of labor had to migrate from the economically weak sectors of the economy to seek employment in the centers favored by the industrial bonanza.

By contrast, in Latin America, migration to the city has had more to do with a number of factors inherent in the basic structures of the economy and the underlying process of socio-economic growth than with industrial growth.[28] Within a context of rural unemployment, impoverishment, and demographic pressure on the land, the flight from

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[27]Max Weber, The Theory of Economic and Social Organization, edited and translated by Talcott Parsons, (New York: The Free Press, 1947); Eric Lampard, "The History of Cities in the Economically Advanced Areas", Economic Development and Cultural Change, 3 (1955), pp. 81-136; Allan Predd, The Spatial Dynamics of Urban-Industrial Growth, 1800-1914, (Cambridge, Mass.: M.I.T. Press, 1960).

[28]Sergio Bagu and Epifanio Palermo, "Condiciones de Vida y Salud de los Trabajadores y Sus Familias en América Latina", Cuadernos Americanos, 145 (1966), pp. 15-34; Héctor Martínez, "Las Migraciones Internas en el Perú," Aportes, 10 (1968), pp. 136-160; Juan Elizaga, "Encuestas sobre Inmigración al Gran Santiago," Centro Latinoamericano

the countryside appears as the only alternative for job opportunities and personal advancement.[29]

However, work opportunities in industry have not kept pace with the influx of people.[30] The increase of population in the cities without employment has created in turn a pool of manpower which cannot be fully absorbed into high productivity employment, thus giving rise to contingents of individuals living what is often called a "marginal" existence. The most obvious sign of marginal existence has been the mushrooming of squatter settlements and the great "dormitory" cities that fringe the glittering urban centers.[31]

Chile is faced with many of the problems characteristic of urban Latin America. Urbanization in Chile reached a high level by 1930, when 49.4 percent of the population was located in urban areas.

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de Demografía (CELADE). Santiago, 1964; Mario Margolis, "Sociología de las Migraciones", Aportes, 3 (1967), pp. 5-23; Arthur Conning, "Rural-Urban Destination of Migrants and Community Differentiation in a Rural Region of Chile", International Migration Review, 6 (1972), no. 2 pp. 121-146.

[29]R. Paul Shaw, Land Tenure and the Rural Exodus in Chile, Colombia, Costa Rica, and Peru, (Gainesville: The University of Florida Press, 1976); Carlos Ruiz, "Algunos Aspectos de las Migraciones Internas en Guatemala", Centro Latinoamericano de Demografía (CELADE). Santiago, 1961; Bruce Herrick, Urban Migration and Economic Development in Chile, (Cambridge, Mass.: M.I.T. Press, 1965).

[30]McGee, Terence, "The Rural-Urban Continuum Debate: The Pre-Industrial City and Rural-Urban Migration", Pacific Viewpoint, 5 (1964), no. 2, pp. 59-82, and Urbanization in the Third World, (London: Bell & Sons, 1972); José Nun, "Superpoblación Relativa, Ejército Industrial de Reserva y Masa Marginal", Revista Latinoamericana de Sociología, 5 (1969), no. 2, pp. 174-236.

[31]Larissa Lomnitz, "Supervivencia en una Barriada de la Ciudad de México," Demografía y Economía, 7 (1973), no. 19, pp. 58-85; Jaime Giannella, "Marginalidad en Lima Metropolitana", Centro de Estudios y Promoción del Desarrollo (DESCO), Lima 1970; Luis Bravo, Urbanización: Caos o Progreso?, (Santiago: Universidad Católica de Chile, 1962).

Markos Mamalakis puts it as follows:

> The concentration of economic activities in Greater Santiago, Valparaíso and Viña del Mar, the lack of open agricultural land after 1880, the absence of any major subdivision of latifundios, the lower mortality rates in the cities, and the push of surplus labor out of the latifundio-held land were among the key factors that made Chile more than 50 percent urban by 1930 and Santiago its leading city.[32]

The proportion of Chile's urban population rose to 63 percent in 1952, and 67 percent in 1962. By 1970, the proportion of urban population reached 74 percent. That year the five larger urban centers, namely Santiago, Valparaíso-Viña del Mar, Concepción-Talcahuano, Antofagasta and Temuco concentrated more than 3.5 million people, or 40 percent of the total population.

The chief urbanizing factor has been the extraordinary growth of Santiago, the capital city. From 1.3 million inhabitants in 1940, it grew to 1.9 in 1952, 2.4 in 1960, and over 3.0 million in 1970, or nearly a third of Chile's total population. Much of Santiago's growth was due to internal migration. Between 1960 and 1970, for instance, 650,000 persons move to the capital.[33]

Internal migration became significant since the decline of the wheat boom in the 1880's. Migratory flows have moved toward the mining zones of Antofagasta in the north and Concepción in the south. Yet the dominant migratory streams have been toward the towns and the capital city in the Central Valley in a two-generation model of

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[32]Markos Mamalakis, The Growth and Structure of the Chilean Economy: From Independence to Allende, (New Haven: Yale University Press, 1976), p. 25.

[33]Juan Elizaga, "Migraciones en lss Areas Metropolitanas de América Latina", Centro Latinoamericano de Demografía, Santiago, 1970.

migration:[34] a first-generation movement from the rural areas to the towns and a second-generation movement to the capital city.[35]

Migration to Santiago is made simpler by the fact that 88 percent of the national population live in the central provinces within easy reach of Santiago. Rail and bus services connect the capital with the agricultural areas of the Central Valley from which, according to two studies, 89 and 88 percent of the migrants come.[36] The five provincial cities with the highest index of emigration[37] are San Fernando, Los Angeles, Linares, Curicó, and Chillán.[38] All lie between the Bío-Bío river and Santiago, a distance of about 300 miles.

Juan Elizaga's research found that 62 percent of male migrants and 56 percent of female migrants migrated to Santiago prompted by the prospect of more lucrative occupations. Yet Bruce Herrick's work on urban migration and economic development in Chile found that employment opportunities were no more favorable in Santiago than in the rest

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[34]Migration is assumed to occur in a series of stages or steps: rural area to village, village to town, town to city. The step-migration theory can be traced to Ravenstein's nineteenth century study of England. He observed a shifting or displacement of the population which produced migratory flows in the direction of the larger cities. The gaps thus left were then filled by migrants from more remote areas. Several studies on Latin American migration however seem to dispute the step-migration theory. Their results indicate that a large proportion of the migrants moves directly to the primate center witouut intermediate stops. Other studies note that the migration steps take place but they are not necessarily met by the same generation.

[35]Herrick, op. cit., pp. 51-54.

[36]Universidad de Chile. Instituto de Patología Social. Migración Interna hacia Santiago de Chile, Santiago, 1968, p. 90.

[37]Number of outmigrants in relation to population.

of the country.

Furthermore, industrialization, at least in its effects on employment, proceeded very slowly and was almost as far advanced outside Santiago as within the capital. In fact, falling unemployment rates in Santiago were associated with a shift to the services as relatively more important employers of the labor force.[40]

This latter finding brings to a focus a corollary of the non-industrial base of Chile's urbanization. The centralization of the labor force in specific urban centers initiates a search for employment throughout the economy and, particularly, in the urbanized industrial and service sectors of the economy.

However, in contrast to the developed countries, in which the "core" economy is large, dynamic and innovative, and the "peripheral" sector is relatively small, in Chile the "core" sector is small and unable to absorb the labor force. As it happens, personal services and government expenditures rather than industrial dynamism are the principal direct or indirect source of money and employment for both migrants and urbanites alike.[41]

That the peripheral sector of Chile's economy absorbs a fairly substantial proportion of the migrant population is indicated by the percentage of migrants represented in the area of services,

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[38]Universidad de Chile, op. cit., p. 100.

[39]Elizaga, op. cit., p. 1970.

[40]Herrick, op. cit., p. 70.

[41]The implication, however, is not that in-migrants alone are the urban unemployed. Rather, it is their addition to the total urban labor force which results in an excess of supply.

especially personal services: 39 percent of male migrants versus 7.7 percent of non-migrant males; 86.7 percent of female migrants versus 21.3 percent of female non-migrants.[42] It is further assumed that the percentage of migrant underemployment in the tertiary sector is still larger.

R. Paul Shaw makes the following comment on the characteristics of Chile's economy over the 1952-60 period, when the urban sector grew by approximately 30 percent due to rural migration:

> 1. The visible nonagricultural employment level was, on the average, three times that of the agricultural umemployment level in Chile's twenty-five provinces, and real wages in the urban sector dropped by approximately 8 percent, due to the influx of unskilled in-migrants.
>
> 2. Urban unemployment at least doubled in every major Chilean city (from 4 to 8 percent); underemployment rose consideraly (that is, approximately 12 percent of Chile's labor force was working less than thirty-five hours per week).
>
> 3. Rates of intraprovincial rural-urban migration were highly associated (curvilinearly) with declines in provincial urban acitvity rates, again indicating possible increases in disguised unemployment.
>
> 4. The majority of urban in-migrants from rural areas were absorbed into the service industry, whereas the service industry's contribution to the country's gross domestic product did not increase.[43]

It is frequently remarked that, in Latin America, political control of the largest city is tantamount to political control of the nation.[44] The current magnitude of the process of population

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[42]Elizaga, op. cit., 1970.

[43]Shaw, op. cit., p. 18.

[44]Horowitz, op. cit., p. 13.

redistribution may change this view. In Chile at least, given that the rural and urban sector can be approximately equated with agricultural and industrial production, the hyperurbanization of Santiago recasts the process of population redistribution into one of urban/-regional polarization in which the resource gap between Santiago and the rest of the nation seems to grow unabated.[45]

Perhaps more significantly, as the national metropolis is the setting where national goals and local wants and needs confront each other more intensely, the financial flow to Santiago may lead to local demands for greater autonomy.[46] In this sense, urbanization and national development appear to resolve into conflicting rather than complementary goals.

Thus far, the discussion of urbanization suggests that urban growth is simply the result of internal migration and the historical predominance of the city over the country. Yet, in a very real sense, the "urban explosion" is the "population explosion".

2. Population

From 87 million in 1920, the population of Latin America has grown to 294 million in 1972, or a change in the rate of population growth

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[45]Some economists contend that internal migration tends to balance economic inequalities between regions by offsetting their income differentials. The relief of excess manpower in labor-force export areas causes an increase in local income levels. This increase is in turn offset by the proportional income decrease in the areas recipient of labor force. See Bernard Okin and Richard Richardson, "Regional Income Inequalities and Internal Population Migration", Economic Development and Cultural Change, 9 (1961), no. 2, pp. 128-143.

[46]For examples of separatist movements or sentiment in Chile, see Federico Gil, The Political System of Chile, (Boston: Houghton Mifflin, 1966), pp. 132-133.

from 1.8 percent in 1920 to 2.8 percent in 1970, well above the world average of 2 percent per annum. Such a growth rate will produce a doubling of the population in 25 years.[47]

Overall population growth in Latin America has been substantially concentrated in the urban areas (see Tables IV-1 and IV-2). John Miller points out that:

> Although the total population increase was 32.2 percent between 1950 and 1960 in all Latin America, the total population increase in the urban zones (cities of 20,000 or more inhabitants) was 67 percent. The rural and small town population grew by a considerable smaller rate, 19 percent. These coupled trends (a high overall population growth rate and an urban growth rate, almost four times that of the rural rate) raised the urban population in cities and towns of 2,000 or over from 39 percent of the total population in 1940 to 49 percent in 1960. As a result, cities grew at an average annual rate of 4.5 percent (some few at 6 percent or more) compared with a rural growth of 1.4 percent.[48]

Thomas Sanders makes a similar point in his survey of urban growth and public policty in Brazil:

> Between 1940 and 1950, the rural population grew 4.8 million and the urban about 4.9 million, a ratio of less than 1:1.1. From 1950 to 1960, the rural population increased another 5.8 million, a ratio of 1:2.2, bringing the urban component up to 45.1 percent. In the decade from 1960 to 1970, however, the ratio became 1:8, the rural population increasing by only 2.6 million in comparison with 21.1 million in the cities. During the current decade, the rural

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[47]Data on demographic, vital and health statistics are drawn from Research Data Bank of Development Indicators, Vols. I, II and III, a publication of the United Nations Research Institute for Social Development. Geneva, 1976. Other sources include United Nations Demographic Yearbook (several volumes), and Statistical Abstract of Latin America, (Los Angeles, Cal.: University of California.).

[48]Miller and Gukenheimer, eds., op. cit., pp. 3-4.

> population is expected to decline by 1.6 million, at the same time that the cities increase by 27 million.[49]

The urban expansion began to emerge during the 1950's and has since become increasingly strong owing to two mutually reinforcing factors: sharply declining mortality rates combined with consistently high birth rates, and the steady influx of rural residents. The high rate of population growth in Latin America however disguises striking national differences. Colombia, Ecuador, Peru, and Venezuela, which together had 38 million people in 1960 and 53 million in 1970, reflect a yearly average rate of 3.3 percent. Argentina and Uruguay reveal relatively low rates of 1.5 and 1.3 percent a year, respectively, which can be related to the older age structure of these two countries as well as historically low levels of fertility rates. Conversely, El Salvador and Mexico exhibit high annual rates of 3.7 and 3.5 percent in the same interval.

The significance of these variations in growth rate can be expressed by the time it will take for the population of some of these countries to double. Given the rates for the 1960-70 interval, the 1960 population of Argentina--20.0 million--would double in 45 years; Mexico's 34.9 million in 20 years.

Of the remaining Latin American states, Chile's 1.9 percent a year in the 1960-70 interval is the only rate of population growth approaching the rate levels of Uruguay and Argentina. This has been

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[49]Thomas G. Sanders, "Urban Growth and Public Policy in Brasilia's Satellite Cities", American Universities Field Staff Reports, East Coast South America Series, (Brazil), 17 (1973), no. 6, p. 1.

the result of a rapid and continuing reduction in population increases in the last decade, especially in the late 1960's.

Chile's reproduction of the population pattern set earlier by Argentina and Uruguay is by no means accidental. In recent years Chile has become Latin America's most important center of demographic and family planning research and practice. Not only in Santiago the home of the Latin American Demographic Center (CELADE), the United Nations agency which has evolved as the main institution for demographic research and training, but for over a decade now Chile's Servicio Nacional de Salud, or National Health Service, has been increasingly committed to family planning programs--a euphemism for contraception--to curb the spread of abortion and its resultant disasters among poorer Chilean women (see Figure IV-3).

The need to implement an official program of family planning was further substantiated by concern over the country's rapid pace of population growth and the problems that this growth either intenfied or generated. Greater attention to problems of population growth arose from the necessity to cope with at least three demographic events found elsewhere in Latin America. They included: 1) the massive expansion of the urban population, or the proportion of Chileans living in cities of 20,000 or more inhabitants; 2) the proliferation of marginal communities in and around larger urban centers, especially in the capital city; and 3) population growth at the national level, which was the large phenomenon underlying population trends.

The seriousness of the population growth problem can be appre-

ciated by the following events.[50] It took 360 years for Chile's population to muster 3 million people by the turn of the twentieth century. Yet, it took only seventy years for Chileans to triple their numbers to 9.3 million by 1970.[51] As shown in Figures IV-4 and IV-5, Chile's population grew at less than 1.6 percent per annum before 1930, Chile's population has been altered both in growth and distribution as a result of a steady drop in mortality that has maintained its momentum since the 1920's, while fertility has increased to consistently high rates (Table IV-3). By 1970, mortality was down to 9.6/1000 from 27.0/1000 in 1934. The decrease in mortality stemmed from overall sanitary and health improvements; more recently, the mortality drop is related to the age structure of the population which is comparative pre-adult and therefore low in mortality.

The shift to lower mortality produced an improvement in life expectancy from 40 years in 1930 to 62 years in 1970. But the most important manifestation of lower mortality rates was the acceleration in population growth: 2.5 percent between 1952 and 1957 and 3.0 percent during 1959-64, or an increase of almost 100 percent in thirty years.

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[50]Statistics and trends on Chile's population are found in Octavio Cabello, "The Demography of Chile", Population Studies, 9 (1956), no. 3, pp. 237-250. See also O. Andrew Collver, Birth Rates in Latin America: New Estimates of Historical Trends and Fluctuations, (Berkeley, Cal.: University of California. Institute of International Studies, 1965), pp. 76-85; and U. S. Department of Health, Education and Welfare, Recent Mortality Trends in Chile, Series 3, no. 2. Washington, D. C., 1964, pp. 1-4.

[51]A problem of some concern is the true population of Chile for 1970. According to the 1970 census, 8.8 million inhabitants were enumerated. But other sources, including CELADE's reports and the United Nations Demographic Yearbook, give a national total of 9.7-9.8 million. The gap was subsequently narrowed once Chile adjusted census data upward to 9.3 million to account for underenumerations, a factor already taken into account by CELADE and the United Nations.

The unprecedented rates of population growth after 1930 mostly accrued to urban population growth. Between 1950 and 1970 practically all the population increase (3.78 million) was absorbed by the urban segment. While rural population was stagnant, that of urban areas doubled between 1950 and 1970.[52]

As the rural population had already been reduced to a minor proportion of the total,[53] the logical corollary to Chile's urban population growth trends was that the impact of continuing migration to the cities would be relatively slight and that the expected gain in urban population would depend primarily on fertility rates in the cities themselves.[54]

The realization that the trend toward increased urban population growth would worsen the problem of bringing Chile's urban growth down to more manageable levels, made the implementation of a program of family planning almost imperative. However, what it is necessary or desirable from the economic point of view may not be demographically feasible. Although the family planning program has reduced Chile's birthrate from 2.5 in 1964 to slightly under 1.7 percent in 1975, the drop in the rate of human reproduction is not, as calculations demonstrate, an immediate halt to population increases. Continued population growth is implied even if fertility declines rapidly

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[52]Corporación de Fomento (CORFO), Perspectivas del Crecimiento de la Población Chilena, 1970-1985, (Santiago: CORFO, 1970), p. 15

[53]25.8 percent in 1970 Census.

[54]International migration flows as a factor for population growth are discounted since given contemporary world patterns they should have a fairly small bearing on increases in Chile.

whenever the demographic conditions resemble those commonly found in developing countries. The conditions include an age distribution skewed towards the young, mortality that is relatively low or declining, and high fertility or fertility that may have been declining during the past ten years or so.

Such conditions are present in Chile's population structure. The country's age distribution reveals a young population despite a decrease in the percentage of people under fifteen years old from 39.9 percent in 1960 to 39.3 percent in 1970. This decrease is associated with the fewer number of births registered in the second half of the 1960's as a consequence of the family planning program.

Reference has been made to the improvements in the country's capacity to control death over the past four decades. Infant mortality, a more accurate measure of the impact of death on population growth as the risk of dying is strongly influenced by age, has been reduced from 11.6 percent a year in the 1960-65 interval to 9.4 percent in the 1965-70 period.

It may be noted that the demographic conditions existing in Chile depict a type of shift in population structure generally known as "demographic transition", in which population growth is the result of falling death rates resulting from a young age distribution and improvements in health conditions, unaccompanied by adjustments in birth rates (see inset 3 below).

Demographic Transitions

	Births High	Births Low
Deaths High	Stable population at a low level	A declining population; could become extinct
Deaths Low	A growing population with spreading age base	Stable population but aging.

Such demographic transition holds that population numbers will continue to increase even after a natural replacement rate of 1.0 is attained, that is, the point in which each couple is having only the two children required to replace themselves. Until the age structure of a population has time to shift away from one with a high proportion of young people to a so-called older population, there will be more young people having babies than older people dying, and the population will continue to grow.

The effect of the "demographic momentum" is shown by an estimation of the age and sex structure of several Latin American countries as projected by CELADE for the year 2000 (see Figure IV-6). The corresponding population pyramids are quite different and point to continuing growth; only in the case for Argentina, Uruguay and Chile do "older" populations appear to any appreciable degree. For most of the remaining countries, CELADE's projections anticipate age and sex structures in the year 2000 to be much the same as they are in 1970, carrying with them the implications of rapid population increase, but on an ever-broadening scale (Table IV-3).

In sum, any effort to stabilize population growth to levels more in accordance with urban population growth expectations requires a span of time--first to reduce increases merely to replacement levels and, second, to adjust age structures to a point where the number of births equals the number of deaths.[55] In Chile, the decline in the birth rate resulting from the family planning program will certainly reduce the rate of growth of the urban population. Reduced rates of

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[55]This final stage of the demographic transition is a 60-year span leading to a condition referred to as "zero population growth".

urban population growth will help the government to deal more effectively with problem of uncontrolled urban growth. But immediate relief from demographic pressures in urban areas in the decades ahead is an unrealistic expectation.

Population increases in urban areas will occur despite the reduction in birth rates as a reflection of the youthful age structure of the Chilean population. The high fertility rates that prevailed from 1950 to 1964 resulted in an increase in the children population. This population is now entering adulthood and having their own children. Although most will plan their families and have fewer children than their parents did, the large percentage of young adults in the total population who are producing their families will keep the natality rate up. Even with general practice of contraception, the 1970 population of 9.3 million will grow to 15.8 million,[56] (see Figure IV-7).

Chile's urban areas will unquestionably absorb the bulk of the population increases before the full impact of the family planning program is felt. Consequently, the facilities required for the growing population will have to be provided largely in the urban areas.

Up to 1964, the shift in the age distribution toward the young ages meant primarily a sharp increase in the number of children. This population upsurge is now beginning to work its way through the adult age structure. One aspect of this process is the implication for the labor force and for employment prospects.

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[56]Centro Latinoamericano de Demografía (CELADE), "América Latina: Indice de Crecimiento de la Población en el Período 1950-2000." Por Países. Boletín Demográfico, 7 (1974) no. 13. Santiago de Chile.

In rural-urban terms, it is the cities which will have to cope with the problem of adequate employment opportunities in the decades ahead.[57] Considering the chronic inability of the Chilean economy to employ the additions to the work force,[58] and as unemployment tends to be more overt in the city, the prospects for social and political stability appear less than promising.

Social welfare, especially education and housing, is another consideration. In terms of education, as the period of most rapid growth of the primary-school-age population has presumably already passed,[59] pressures for school facilities will eventually ease in the future. But, again, it is the pressure in particular geographic

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[57]This does not mean that the problem of low rural incomes, or even rural poverty, will disappear in such areas. Their elimination is likely to depend on factors outside the scope of this study. See the analysis made by the Inter-American Committee for Agricultural Development, Land Tenure Conditions and Socio-Economic Development of the Agricultural Sector, 1966, See also Solon Barraclough and Arthur Domike, "Agrarian Structure in Seven Latin American Countries", Land Economics, 42 (1966), no. 4, pp. 391-424.

[58]Between 1952 and 1960, the years in which Chile's rate of population growth was highest, the net increase of new jobs was 48 percent of the 1952-60 increment to the labor force. The average cumulative increase of the labor force was over 1 percent, but the number of jobs created increased by only one-half of one percent. See Frederick S. Weaver, Regional Patterns of Economic Change in Chile, 1950-1964, (Ithaca, N. Y.: Cornell University Press. Dissertation Series, 1968), no. 11, p. 187.

[59]Between 1960-70, the greater proportion of school enrollment accrued to basic education (1st to 8th grades), even though it decreased its share from 90 to 85 percent in that decade's school enrollment. High school enrollment however increased from 6 to 8 percent. Technical education enrollment increased from 2 to 4 percent See Chile. Oficina de Planificación Nacional (ODEPLAN), Políticas Educacionales del Gobierno de Chile. Santiago, 1974.

areas rather than the total aggregate primary-school-age population which is most exacting.

At one extreme, the rural primary school population has decreased substantially, and if migration continues the decline may become permanent. Hence, no increase in school place is expected, except perhaps to improve attendance ratios. At the other extreme, the cities most clearly will absorb the bulk of the expected increase, and growth rates in such circumstances can probably be high.

Similarly, in a context of increasing numbers, a housing program must not only confront the need accruing from the increase in population, but it must deal with existing inadequate dwellings and replace those that deteriorate.

In Chile, the urban nature of the housing problem was already significant in 1952 when 49 percent of the population in sub-standard housing was classed as "urban". In 1964, the corresponding figure was 53 percent.[60] Even more dramatic is the fact that not including the provinces of Valparaíso, Santiago and Concepción, 14.8 percent of the 1952 housing deficit was urban, and in 1964, 37.7 percent.[61]

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[60]Chile's censuses of 1952, 1960, and 1970 show the proportions of "urbanization" to be 60.2 percent, 68.2 percent, and 74.2 percent, for these three years. The definition of "urban" in the censuses is very elastic and includes "populated centers (that)...offer sufficient public or municipal services to give them, functionally, urban characteristics", and "populated centers with certain demographic and administrative importance". Dirección de Estadísticas y Censo, XII Censo General de Población y I de Vivienda, I, p. 67.

[61]Dirección de Estadísticas y Censo, I Censo Nacional de Vivienda, 1952, pp. 3-49. Also see the 1964 survey reported by ODEPLAN, Departmento de Planificación Regional. Bases para una Política. Table 34.

Unquestionably, the incorporation of "a growing proportion of the total population into urban settlement patterns", and "into urban social structures and styles of life", imposes both an economic burden and a challenge to Chile's government. The challenge is to find a policy capable of arresting the cumulative overconcentration of population and resources, especially in the primate city. Such a policy would have to be national in scope and application and multiple in direction, including varied concurrent efforts to create large labor markets distributed throughout the national territory by industrial, agricultural, mining, fishing, and other development schemes.

In principle and practice, policy of this sort would require public coordination and control at the level of the national society, particularly in view of the degree of centralization of Chile's decision making structure and the extent to which variations in the central variables of the national economy affect the configuration of the country's urban/regional structure. Finally, such a policy would have to redirect urban/regional growth through incentives that may foster intra-city migration[62] from larger to smaller urban centers and the growth of secondary cities. The Regional Development Act of 1974 is an approach to policy of this sort.

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[62]The need for intra-city migration seems evident when considering that urban growth in the primate city will be the result of increased city-born population.

TABLE IV-1

Urban and Rural Population Distribution Trends, 1969-70. Some Selected Latin American Countries (in millions)

Country	Total Population		URBAN Population		URBAN Percent		RURAL Population		RURAL Percent	
	1960	1970	1960	1970	60	70	1960	1970	60	70
Argentina	20.0	23.4	12.1	15.5	60	66	7.9	7.9	40	34
Brazil	70.0	93.2	21.9	37.7	31	40	48.1	55.5	69	60
Chile	7.4	8.8	3.7	5.3	50	60	3.7	3.6	50	40
Mexico	34.9	48.4	18.2	27.7	52	57	16.7	20.7	48	43
Peru	9.9	13.6	3.1	5.8	31	43	6.8	7.8	69	57
Venezuela	7.3	10.3	3.9	6.3	53	61	3.4	4.0	47	39

SOURCE: CELADE

TABLE IV-2

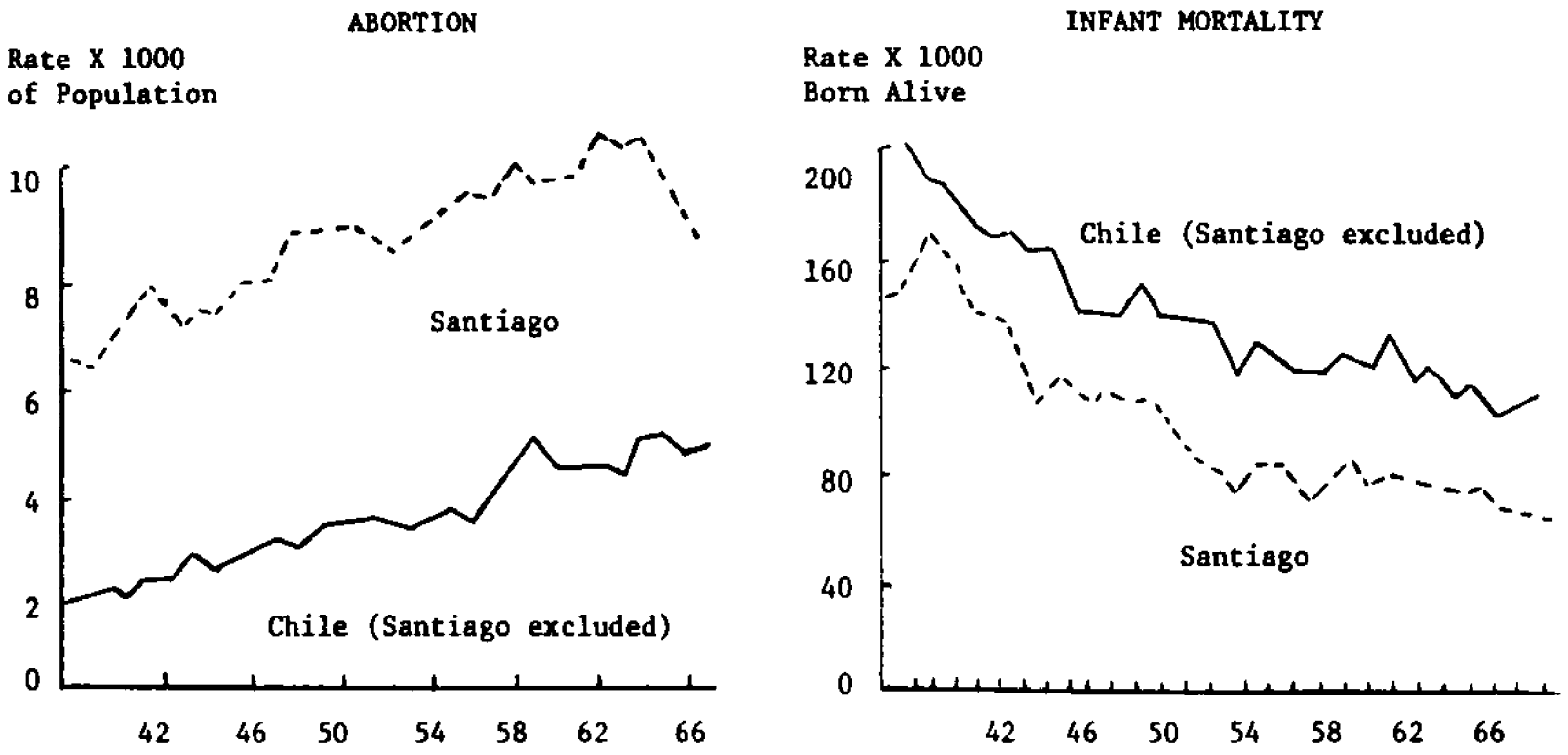
Population of Some Selected Latin American Capital Cities and of Río de Janeiro and Sao Paulo, Brazil 1960-1970

City	Population		National percentage of urban total	
	1960	1970	1960	1970
Buenos Aires	6,739	8,353	57.5	54.0
Río de Janeiro	4,574	6,847	22.4	18.1
Sao Paulo	3,950	7,838	19.3	20.8
Santiago	1,907	2,850	51.7	54.1
Mexico City	5,564	8,605	31.8	31.1
Lima	1,784	3,318	60.3	57.4
Caracas	1.306	2,058	36.1	32.7
Total (as percentage of regional urban total)	25,824	39,869	43.1	40.6

SOURCE: CELADE

TABLE IV-3

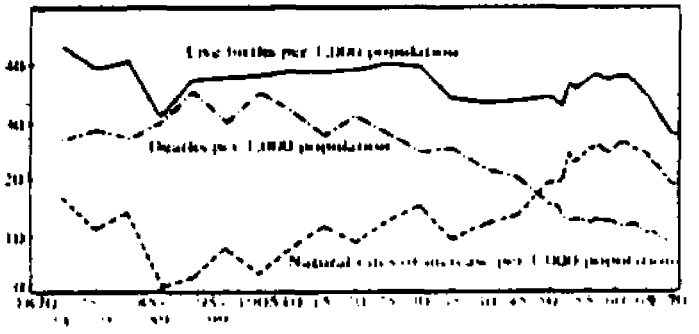
RATE OF HOSPITALIZATION FROM ABORTION COMPLICATIONS AND INFANT MORTALITY IN SANTIAGO AND THE REST OF CHILE



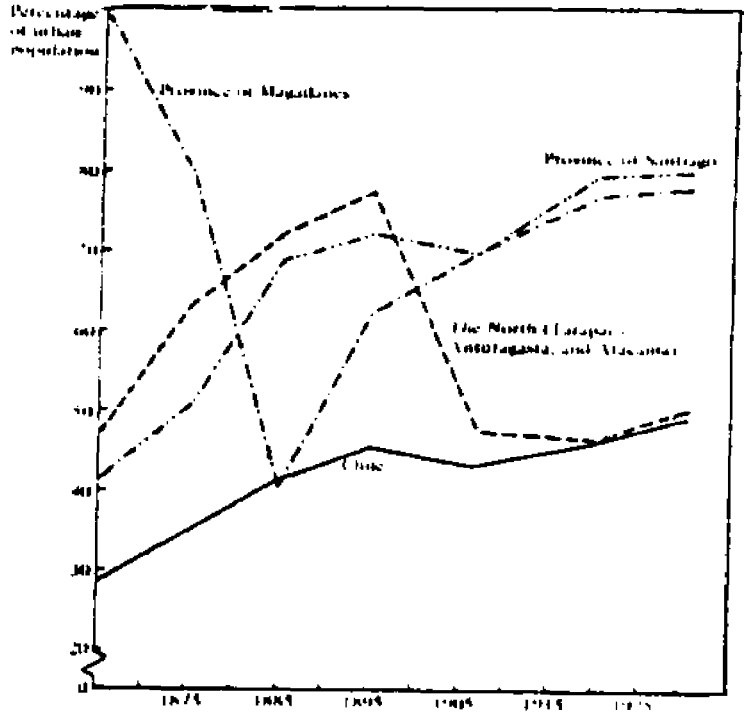
SOURCE: Philip B. Taylor and Sam Schulman, eds., Population and Urbanization Problems in Latin America. A Conference, (Houston: University of Houston. Latin American Studies Committee, 1971), p. 18

TABLES IV-4 AND IV-5

Live Births, Deaths, and Rates of Natural Increase per 1,000 Population, Chile: five-year averages, 1870-74 to 1895-99, and Selected Years, 1905-1969



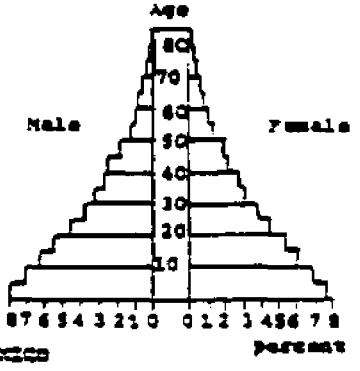
Percentage of Urban Population in Chile and in the Provinces of Santiago, Magallanes and the North, 1865-1930



SOURCE: Markos Mamalakis, The Growth and Structure of the Chilean Economy: From Independence to Allende, (New Haven and London: Yale University Press, 1976), p. 8; p. 21.

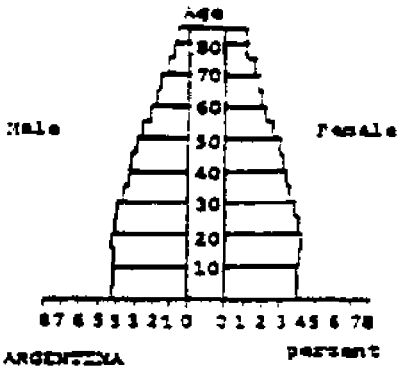
TABLE IV-6

Age And Sex Pyramids for the Year 2000



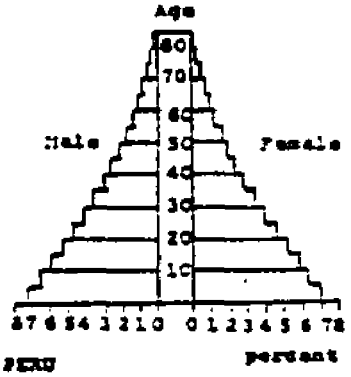
MEXICO

Projected population:
132.2 million inhabitants



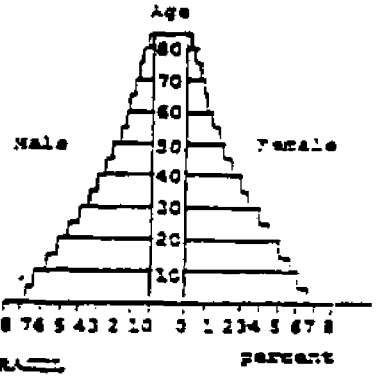
ARGENTINA

Projected population:
32.8 million inhabitants



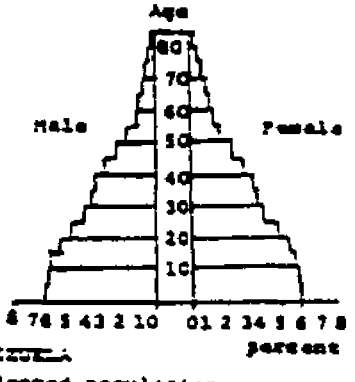
PERU

Projected population:
30.3 million inhabitants



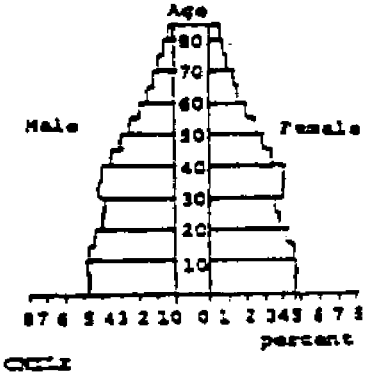
BRAZIL

Projected population:
212.3 million inhabitants



VENEZUELA

Projected population:
23.8 million inhabitants



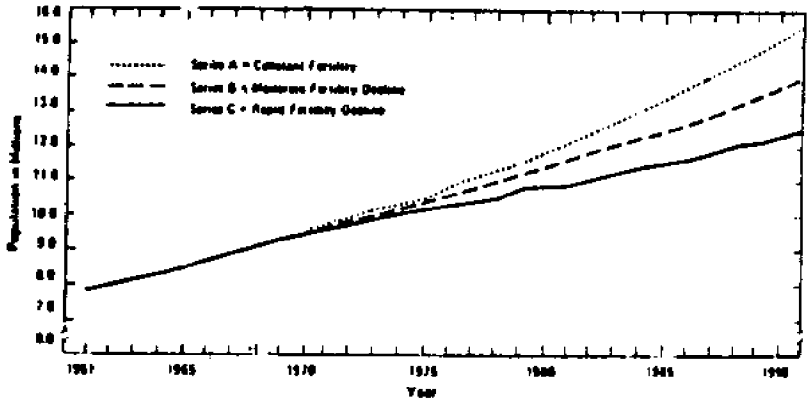
CHILE

Projected population:
15.8 million inhabitants

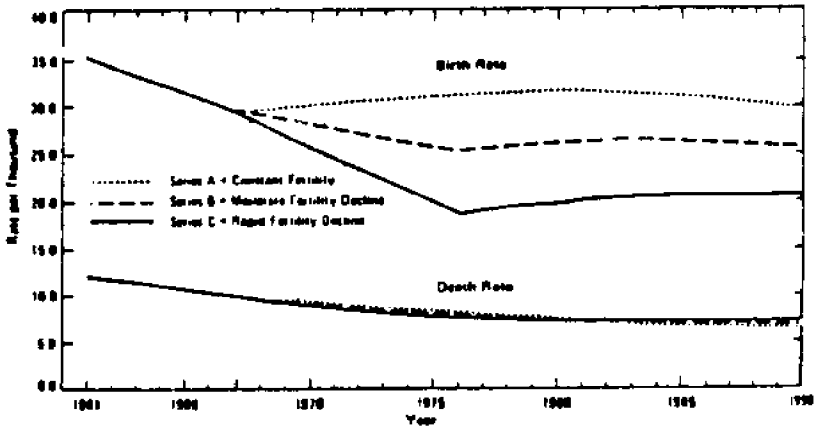
SOURCE: Centro Latinoamericano de Demografía (CELADE), "América Latina: Indice de Crecimiento de la Población en el Período 1950-2000," Por Países. Boletín Demográfico, 7 (1974), no. 13. Santiago.

TABLE IV-7

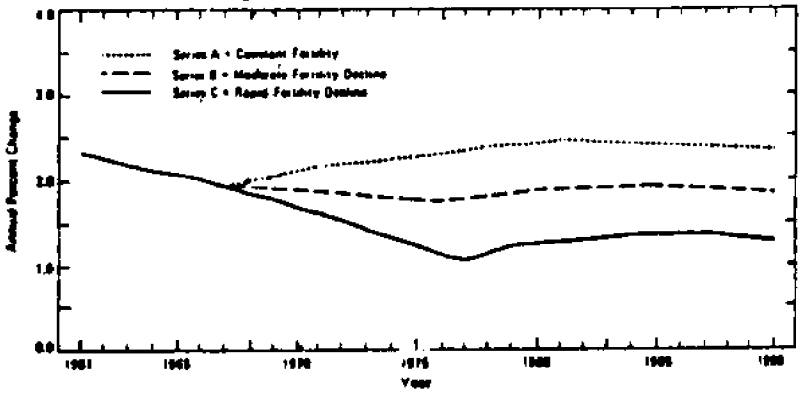
Estimated and Projected Total Population of Chile, 1961 - 1991



Estimated and Projected Birth and Death Rates for Chile, 1961-1991



Estimated and Projected Rates of Natural Increase for Chile, 1961-1991



SOURCE: Steve W. Rawlings, Population of Chile. Estimates and Projections, 1961-1991, U.S. Bureau of the Census. Demographic Reports of Foreign Countries. Series P-96. Washington, D.C. 1969.

CHAPTER V

Chile's Urban-Regional Imbalances
The State's Recognition of the Problem

The preceding chapters evaluated a variety of factors which helped to shape Chile's urban/regional structure, the patterns of urban/-regional imbalance in the distribution of resources and activities, and the trends that have prompted the Chilean Government to support a policy of urban/regional development. The motivation for governmental urban/regional policy arises in connection with problems of umemployment and underemployment, internal migration, disparities in levels of standards of living, monocultural production, underutilization of human resources, population agglomeration in urban areas, and the provision of employment and services to anticipated urban population growth. It is assumed that unless counterveiling measures are taken, the pressure in physical resources and services, especially in the large urban centers, and the living conditions of the inhabitants could well become intolerable.

Prior to the 1960's there was no enunciated urban/regional policy in Chile. Urban/regional planning was all but unknown despite the existence of an "unconscious" policy favoring the central metropolitan area. As a result, urban/regional planning essentially mobilized resources toward national goals.

Setting national goals was the exclusive prerogative of the power elite associated with the outwardly-oriented economy between 1818 and 1930. Throughout this period, a socio-economic and political system based on primary export surplus represented the principal national goal. Lack of conflict among members of the ruling elite in defining

the national goal made resource mobilization a relatively easy endeavor.

In 1930, the economic grievances exposed by the Depression combined with the emergence of the middle-class Radical Party and the move toward import substitution changed the aims, means, and the rules of the game. The task of setting national goals and mobilizing resources entailed both radical shifts in political alliances and power and a great deal of compromise to accommodate the various views on what national goals should be pursued.

The transformation in the pattern of political behavior encouraged a departure from the traditional approach to national problems. With the collapse of Chile's export economy in 1930, there emerged the resolution to give the country new and broader bases of internal support to protect if from the vagaries of world markets. Two lines of action came forth. 1). To grant the government unprecedented initiative over manpower and resources through a variety of policies, including direct and indirect foreign trade controls, fiscal and pricing policies and state investment policies; 2). To provide the means for the government's channeling of all national productive activities to the goal of industrialization.

Of the two lines of action, the latter conveyed the first explicity recognition of the need to adopt some kind of comprehensive rather than piecemeal approach to national goals. The response was to plan, and planning, thus predicated, became tantamount to national planning. It also became national planning within an ideological context, for each of the parties or coalition of parties that came to power in the 1930-70 interval invariably relied on its ideological framework of reference in dealing with the problem of aims and

means.[1]

It should be pointed out that all governments in Chile between 1930 and 1970 subscribed to the belief that entry into the "modern" world depended on the economic strength of the nation measured by industrial growth. In keeping with this idea, the overriding concern of these governments resolved into a very simple question: How can industrialization be achieved as rapidly as possibly? In the 1930's, the answer to this question was as simplistic: state protectionism of domestic industry through tariffs and credits to local industry.

It was assumed that building up an import-substituting industrial sector would move the country away from "backwardness" and into the patterns of advanced development represented by Western industrial societies, especially the United States. It was further assumed that import substitution would assure the country's road to self-sustaining growth and prosperity in a matter of few decades.

In pursuit of the goals of industrialization, modernization, self-sustaining growth and prosperity, governments set about implementing policies and mobilizing resources. At this point, the question arose of how to coordinate the various policies so as to make them consonant with the general goals.

The Popular Front coalition of Radical and leftist parties that won the 1938 presidential election settled the issue by ruling that production and resources were to be related through a plan of national

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[1]Willard Mullins conceptualizes "ideology" as a logically coherent system of symbols which, within a more or less sophisticated conception of history, links the cognitive and evaluative perception of one's social condition--especially its prospects for the future--to a program of collective action for the maintenance, alteration or transformation of society." Willard Mullins, "On the Concept of Ideology in Political Science", American Political Science Review, 66 (1972), no. 2, p. 509.

development. The first step therefore was the creation of an economic planning body with the necessary technical expertise to fulfill the task of drawing a national development plan. Hence the creation in 1939 of the Corporación de Fomento de la Producción (CORFO), or National Develcpment Corporation.[2]

Produced in the mid-1940's, CORFO's plan fell into a number of related and mutually complementary government programs of action, sometimes in partnership with private investors. The plan called for increasing mobilization of Chile's fuel and mechanical energy, improved metal exploitation and refining, agricultural mechanization, industrial processing of fisheries, expansion and modernization transport and communications, and technical upgrading of manpower.[2]

In the light of this and subsequent CORFO's development plans, Chile's industrializing process continued through the 1940's and well into the 1950's. In the years following the end of World War II, the positive stance from international organizations and foreign aid agencies toward industrialization as a requirement of development, further reinforced the country's drive to industrialize.[3]

However, as the complexities of economic growth become apparent, the expected contribution of industrialization to the attainment of a "modern" status for the nation became tinged with a sense of disappointment. The spiral of inflation that dated back to the 1880's

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[2]Herman Finer, "The Chilean Development Corporation: A Study in National Planning to Raise Living Standards", Studies and Reports. International Labor Office, Montreal, 1947. New Series no. 5.

[3]Economic Commission for Latin America (ECLA), "Desarrollo, Industrialización y Comercio Exterior", Cuadernos de la CEPAL, Series no. 13, Santiago, Chile. 1977.

had not been halted, foreign debt had mounted, and the economy, now stagnated since the early 1950's, was still dependent on international commodities markets. Furthermore, government intervention in the economy to sustain the inwardly-oriented economy helped to widen the "gap" in resources and activity between the primate city and the rest of the urban centers.[4]

Popular dissatisfaction over the performance of development plans was expressed in 1958 with the near victory of a Marxist in that year's presidential election. In response to this dissatisfaction, the coalition of Radical and rightist Conservative and Liberal Parties that won the election took a number of steps in the direction of change. To overcome inflation, stagnation and dependence on copper exports, President Jorge Alessandri introduced a drastic program of economic austerity along with new regulations to attract foreign investment. In addition, Alessandri secured in 1962 the passage of the first land reform legislation in Chile's history.[5]

Alessandri's reforms did not produce the expected results. At the end of his term in 1964 inflation remained uncontrolled and the economy continued to depend on copper exports, which financed seventy-five percent of the budget.[6] That the import-substitution model to

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[4]Published in the early 1960's, CORFO's Georgrafía Económica de Chile, recognized the trend toward increased interregional and urban-rural social and economic disparities and, as such, it made the Chilean government for the first time better aware of the imbalance between the capital city and the provincial cities.

[5]Corporación de la Reforma Agraria (CORA), La Reforma Agraria Chilena. Ley 15,020, (Santiago: CORA, 1962).

[6]Agrarian reform did not fare any better. In actual practice, little land was redistributed between 1962-64. For these years, CORA had announced that it would redistribute 12,347 plots of land. It actually gave only 1,066. See Inter-American Committee for Agricultural Development, Land Tenure Conditions and Socio-Economic Development of the Agricultural Sector, (Santiago: CIDA, 1966), p. 254.

development and modernization was in crisis had become indisputable. Worse, some of the most salient problems of the economy could not be cleared by whatever growth had materialized from import-substitution industrialization.[7] In any case, the increment in national wealth was being swallowed by population growth and urban expansion.

The record on social improvement further underscored the failure of the import-substitution model to development. Not only did an increasingly large segment of the population find itself excluded from the making of decisions which would affect them, but income distribution seemed to be growing more unequal while the tax structure was becoming more regressive.[8] For intellectuals and policy-makers alike it became apparent that, if industrialization is a component of societal development, then the explanation for industry's poor performance as a catalyst for development must be sought in the nature of Chilean society itself.

From this view arose what is still one of the most influential concepts underlying Chile's formulation of national development plans: structuralism,[9] or the idea that in order to attain modernization what

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[7]Arnold Harberger, "Specific Problems in the Economic Development of Chile," in Mario Zañartu and John J. Kennedy, The Overall Development of Chile, (Notre Dame, Ind.: University of Notre Dame Press, 1966), p. 254.

[8]Markos Mamalakis, The Growth and Structure of the Chilean Economy: From Independence to Allende, (New Haven: Yale University Press, 1976), p. 211.

[9]Associated with the structuralist theory are the Chilean economists Anfbal Pinto and Osvaldo Sunkel. See Pinto's Chile: Un Caso de Desarrollo Frustrado, (Santiago: Editorial Universitaria, 1958); and Sunkel's "La Inflación Chilena: Un Enfoque Ortodoxo", El Trimestre Económico, 25 (1958), pp. 570-599.

is really needed is a complete overhaul in the ordering of the nation's socio-economic relationships. Such an event must be accompanied by a massive economic push so as to place the country at a "take off" point from which it can be impelled to self-sustaining growth.

Having lost much of their mass support, the right-wing parties and the Radical Party no longer attracted the reform-minded elements from the middle-class sector. As a result, filling the power vacuum and articulating the pressure for structural change became the domain of Marxists and Christian Democrats.

In the course of the 1964 presidential campaign, the Christian Democratic candidate, Eduardo Frei, successfully interpreted and articulated the national mood for reform. Setting national goals and mobilizing resources became now ideologically permeated by the values of "Christian humanism of a non-confessional projection," and by the firm "adherence to the spirit and forms of democracy."[10] These principles also guided the Christian Democratic road to the good society vis-à-vis the Marxist revolutionary approach of Castro's Cuba.

Frei and the Christian Democratic party committed themselves to a complete restructuring of Chile's society if elected to power in 1964. For rural Chile Frei promised a more radical agrarian reform and rural unionization. For the urban proletariat, he pledged their incorporation into all aspects of national life

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[10]Radomiro Tomic, "Chile Faces Human Development", in Zañartu and Kennedy, op. cit., p. 4.

through a program of "popular promotion." For society in general, he pledged housing development policies, tax reform, income redistribution, and educational reform.[11] Popular support for Frei's reforms was manifest. He polled 56 percent majority vote in the 1964 presidential election.

On taking power, an item of top priority was the creation of a planning body which would coordinate the set of economic, social and political reforms to be accomplished, the means to achieve them, and the timetable for their implementation. In addition, the planning body would attempt to identify the central issues inhibiting national development. Hence the creation in 1965 of the Oficina de Planificación Nacional (ODEPLAN), or National Planning Office, as Chile's central agency--directly attached to the office of the President of the Republic--dealing with the formulation of 1) national planning; 2) sectoral planning; and 3) regional planning.[12]

The national planning function would set goals for the economy and society and program the materials, investment, and output requirements for achieving these goals. Sectoral planning would translate the requirements into consistent activities of the basic sectors of the economy, each of which responds to a Ministry of central goverment: agriculture, industry, transport, housing, education, labor, health and general administration. Regional planning would

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[11]For a report on the Christian Democratic program see "El Congreso del Partido Demócrata Cristiano," Política y Espíritu, 20 (1966), no. 296, pp. 88-100.

[12]Chile. Presidencia de la República. Oficina de Planificación Nacional. Qué es ODEPLAN?, Santiago, 1967.

design schemes for the decentralization of decision making and development.[13]

ODEPLAN's regional planning function represents the first conscious attempt by the state to deal with the problem of regional and urban imbalance. Data to support the need of such a function was not hard to find. In the search for structural impediments to development the spatial patterns of the economy and population emerged as major stumbling blocks. Hence, if development was to proceed in a sustained way, then emphasis should be placed on disaggregating national development goals not only along sectoral but also along regional lines. Furthermore, and in keeping with the structuralist interpretation of Chile's underdevelopment, problems of rural stagnation, internal migration and uncontrolled urban growth were traced directly to the pattern of differential concentration of decision making an development.

It should be pointed out that before the magnitude of the patterns of regional imbalance were widely appreciated and began to influence policy formulation, a number of regional development programs had been implemented in peripheral areas. Between 1955 and 1956, in the face of food shortages and unemployment in the northern cities of Tocopilla and Iquique, the government granted these centers special incentives to facilitate development. In these same years, the Department of Public Works began programming its activities through a system of regions and microregions.

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[13]Chile. Presidencia de la República. Oficina de Planificación Nacional. La Planificación Regional. Una Experiencia Nueva en la Planificación de Chile. Santiago, Chile. 1967.

In 1958, the response to the geopolitical need of extending national sovereignty over the country's border areas led to the creation of local, semi-autonomous bodies such as the Junta de Adelanto de Arica, or Council for the Development of Arica, on the border with Peru and Boliva, and the Corporación de Magallanes, on the southern border with Argentina. On the other hand, in 1953, Arica had been granted the status of free port to provide the area with an external economic base which the city would otherwise hardly develop.[14]

Both the Junta de Adelanto de Arica and the Corporación de Magallanes were geared to generate the conditions favorable to the establishment of manufacturing industries. To that end, they were endowed with broad local decision-making powers and with the capability of jointly formulating with the central government the level at which the objectives and criteria of regional development programs were to be defined.[15]

In 1960, an earthquake that devastated the central-south zone of the Central Interregional System led to the establishment of a regional office of the National Development Corporation (CORFO) in Concepción. This decision led in turn to pressures from the rest of the country for the establishment of similar agencies. In 1961, Consejos Provinciales de Desarrollo (COPRODE) were created to increase efficiency of administration. The Consejos were to act as coordination mechanisms between the central government and the

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[14]Free ports are created to provide temporary, artificially induced development through special incentives such as duty-free imports of capital goods.

[15]Walter Stohr, Regional Development Experiences and Prospects in Latin America, (The Hague: Mouton, 1975), p. 12.

provinces, but the excessive number of participants rendered the Consejos inoperable.

In general, the implications of these programs or organisms for urban/regional devleopment were very limited. First, their scope of action was basically short-termed, incidental, and geographically circumscribed to the intended area. Second, there was no intent on the part of the government to estimate the possible negative or favorable impact that these measures might have at the interregional or national level. It was assumed that these programs would have no other repercussions beyond the specific objectives assigned to them.

This rather naive approach to regional problems suggests that prior to 1965 the creation of programs and organisms aimed at the promotion of local development was not the consequence of conscious urban/regional development. It was rather the government's ad hoc response to contingencies with which it could not deal with the appropriate expediency and efficiency.

With the Christian Democratic approach to national development and modernization, the government's response to the problem of urban/-regional imbalance became a conscious policy as institutionalized through ODEPLAN's regional planning function. In keeping with the regional planning function, ODEPLAN's first line of action was to produce an assessment of the country's urban/regional imbalance. The aim was to identify the problems of individual regions and the formulation of corresponding policy alternatives.

ODEPLAN's assessment led to the conceptualization of three distinct zones of development, "metropolitan", "consolidated", and "colonization". The assessment was made on the basis of physical,

economic and social characteristics as well as on elements of homogeneity, differentiation and complementarity criteria.

The metropolitan zones of Greater Santiago, Valparaíso-Viña del Mar and Concepción-Talcahuano were identified as the areas of highest degree of concentrated development, economic diversification, and urban agglomeration. The three zones possessed an extensive but overburdened infrastructure, and medium to high levels of living, as well as conspicuous differences between the well-to-do and the slum-dweller. National policies called for administrative decentralization and investment incentives away from these three zones.

The consolidated zone referred to the area occupied by a host of medium-density urban centers (generally the provincial capital cities) widely scattered throughout the Central Interregional System. This was a zone of population and resource out-migration as a result of low levels of purchasing power, weak infrastructure, and low to medium usually agriculturally-supported levels of living. National policies in the consolidated zone called for agrarian reform.

The colonization zone referred to the area occupied by isolated, high-density urban centers oriented to natural resource exploitation in both the Northern and Southern Interregional Systems. Large distances between these centers and the national core area underscored their characterization as colonization zones. Some of the centers in the colonization zone, especially those located in the Northern Interregional System, possessed relatively high standards of living resulting from their primary commodities export activities. However, the majority of the urban centers in the colonization zone exhibited depressed levels of living due to the combined effect

of distance and environmental hardships. National policies pointed to transport infrastructure investment, technical assistance, and the granting of special economic privileges to promote both development and settlement.

In decentralizing development a first suggestion was to polarize it. Since the system of internal administration composed of 25 provinces was found inadequate to serve as an active component of regional development policy, ODEPLAN fashioned a new sub-national super-provincial level of government and administration. The new system was composed of ten territorial units or "planning regions", including one for Greater Santiago. Each planning region was to have at least one "growth pole"[16] as the central element activating regional development and administrative decentralization. A growth pole was defined as "an urban center sufficiently large enough, showing incipient growth at a strategic transport location, and with sufficient potential for additions to its infrastructure to attract modern economic activity and extend its dynamic influence to the rest of the region."[17]

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[16]On growth poles, Walter Stohr makes the following comment: "The underlying idea, derived from (François) Perroux's initial study, is that sectoral-geographic clusters of economic activity serve to accelerate development....The assumption is that a growth pole should fulfill a two-fold function, namely, that it be able both to develop itself and to transmit developmental impulses to the rest of the spatial system and thereby influence regional and ultimately national development". Walter Stohr, op. cit., p. 85. In addition to Santiago, growth poles were to be set up at the following cities or group of cities: 1. Arica; 2. Iquique; 3. Antofagasta; 4. LaSerena-Coquimbo; 5. Valparaíso-Viña; 6. Rancagua; 7. Talca; 8. Concepción-Talcahuano; 9. Temuco; 10. Valdivia; 11. Osorno; 12. Puerto Montt; 13. Punta Arenas. See ODEPLAN's document, Política de Desarrollo. Santiago, 1968, p. 42.

[17]Chile. Oficina de Planificación Nacional, Las Regiones de Desarrollo en Chile, Santiago, 1967.

In essence, the goals of regional and national development were to be reached through a framework of "concentrated decentralization", i.e., channeling resource mobilization into selected urban centers or poles of development with potential for self-sustaining growth. Under these conditions, urban centers in the consolidated and colonization zones possessing the potential for self-sustaining growth would be in a better position to compete with those located in the metropolitan zones in securing economies of scale.

From the time of its application in 1968, the Christian Democrat approach to regional development and planning was called into question. Economic arguments against growth poles claimed that Chile's lack of an interrelated urban/regional network to form an infrastructure for the poles precluded the spread of the poles' developmental impulses up and down the urban hierarchy.[18] Furthermore, apart from the growth poles in the metropolitan zones, none of the remaining poles was large enough to sustain major industrial development without a preliminary expansion of infrastructure. The most powerful criticism against growth poles development however stemmed from ideological considerations. As early as 1967, Frei's policies were encountering increasing opposition from the left, which alleged that the reforms were timid, and the right, which found them excessive. By 1970, the leftist opposition had largely coalesced around the so-called theory of "dependency".

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[18]It was postulated that if growth poles were to fulfill both regional and ultimately national development, the cities of Chile should approximate the so-called Zipf city-size distribution typical of developed countries rather than the "primate" city-size distribution peculiar to developing countries.

Dependency is a framework of reference then very much in vogue in analyzing and explaining the dynamics of certain relationships deemed to be detrimental to Latin American society.[19]

The basic hypothesis of the theory of dependency is that development and underdevelopment are partial, interdependent components of one unified international system of distribution and production.[20] Theotonio dos Santos puts it as follows:[21]

> Dependency is a conditioning situation in which the economies of one group of countries are conditioned by the development and expansion of others. A relationship of interdependence between two or more economies or between such economies and the world trading system becomes a dependent relationship when some countries can expand through self-impulsion while others, being in a dependent position, can only expand as a reflection of the expansion of the dominant countries, which may have positive or negative effects on their immediate development.

Dependency can also be found within individual countries, expressed in terms of core- or center-periphery relations. It materializes in the emergence of a dychotomous spatial pattern of population settlment and economic activity, oriented toward and dominated by the center. As a result, the periphery, unable to generate the productive forces capable of dynamizing its economy, ends up wholly dependent on the center for a measure of development.

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[19]Within the theory of dependency there are a number of different orientations. One stems from the structuralist perspective and include such authors as Osvaldo Sunkel, Celso Furtado, Aníbal Pinto, and Aníbal Quijano. Another stems from a Marxian perspective and includes Ruy Mauro Marini, Theotonio dos Santos, and Andre Gunder Frank. Others like Fernando Cardoso, Octavió Ianni, and Florestan Fernandes seem to be a mixture of both.

[20]Fernando Cardoso and Enzo Faletto, Dependencia y Desarrollo en América Latina, (Mexico City: Siglo XXI, 1967).

[21]Theotonio dos Santos, "La Crisis de la Teoría del Desarrollo y las Relaciones de Dependencia en América Latina", in Helio Jaguaribe, ed., La Dependencia Político-Económica de América Latina, (Mexico City: Siglo XXI, 1970). p. 180.

For the Chilean "dependentistas" the above perspective neatly fitted their interpretation of ODEPLAN's growth poles approach to development. Inasmuch as the condition of underdevelopment is intimately connected with the expansion of industrial, capitalist countries, and insofar as ODEPLAN's strategy was predicated on the poles' ability to "attract modern economic activity", i.e., national and foreign industrial concerns, a capitalist web of dependent relations would be strengthened, on the international level. It would further be subsidized by growth poles development through credits and loans while establishing new industries on the national level.

Going further, the dependentaistas moved to challenge the validity of the post-Depression model of national development and its applicability as a model of regional development. The argument was that import substitution, which was assumed would break with the traditional dependency associated with specialization in primary production for advanced countries, had not only failed to lessen dependence on foreign commodities markets but had instead given rise to a new kind of dependency. This was characterized by the domination of the most dynamic sectors of industry by foreign capital. It also featured the imposition of the general conditions, and limits, of domestic economic endeavor through elements of economic coercion such as access to capital and to sources of technological innovation.

Production for the internal market further underlies the new dependency. According to Osvaldo Sunkel, the key to the new dependency is "penetration of the developing countries' economy by the most powerful economic agent of the developed countries' economy,

the multinational corporation."[22] Foreign industrial investment via the multinational corporation is concentrated in technologically advanced industries and in complementary services and infrastructure. As such, the tendency for multinational corporations is to invest and produce in those centers that provide the greatest amount of ancillary economic activities and the larger bulk of consumers. As a consequence, and in a pattern reminiscent of the early stages of import-substitution investment, foreign industrial investment mainly goes to where such internal market size and ancillary economic activities exist, that is, the two or three major urban centers in the country. The end result is a further impetus to the system of dependent relationships at both the international and national levels as well as a renewed thrust to the pattern of spatial imbalances in resources and activities.

To overcome internal and external dependency the government must take a course of action toward altering the nation's internal and external relationships so as to manipulate national technical and social factors as well as relations with other countries. The state is to assume supreme intervention in all aspects of society.[23]

Much of the dependentista demand for full-scale change became articulated in the program of governmental action pledged by Salvador Allende, the candidate of the left-wing Popular Unity coalition of

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[22]Osvaldo Sunkel, "Capitalismo Transnacional y Desintegración Nacional," El Trimestre Económico, 38 (April-June, 1971), no. 2.

[23]Osvaldo Sunkel, "National Development Policy and External Dependence in Latin America," Journal of Development Studies, 6 (October, 1969), no. 1.

Communist, Socialist and other parties in the 1970 presidential election. If elected to power, Allende promised "romper la dependencia" (break with dependency) through nationalization of foreign and domestic holdings, and a radicalization of the trend toward wholesale transformation of the country's structures. In this coincidence of ideology and national goals, a second attempt at conscious regional planning was sought by Allende following his election as President of Chile. In agreement with the dependentista framework of reference, the country's urban/regional imbalance was perceived in terms of "integrated" and "colonized" zones of development.[24]

The zone of integrated development stretched from Coquimbo in the north to Puerto Montt in the south. It contained the nation's most concentrated levels of population settlement and economic activity. This was the area with the highest levels of structural imbalances in the social, economic and decision-making sectors derived from maldistribution of interregional and rural-urban interactions. The region of colonized development included the provinces north of Coquimbo (Atacama, Antofagasta and Tarapacá) and south of Puerto Montt (Chiloé, Aysen and Magallanes). This was the area that provided the resource surplus for the maintenance of an integrated, "colonial" zone of development and yet played a marginal role in the process of national transformation.

National policies called for the implementation of a program of resource mobilization which included the transfer of economic

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[24]Chile. Presidencia de la República. Oficina de Planificación Nacional. Plan Económico Nacional. Programas de Desarrollo, 1971-1976, Capítulo V. Planes Regionales. Mimeographed. Santiago, 1971.

production factors, capital and technology in particular; the redistribution of effective demand or purchasing power between cities and regions through tax equalization; and state investment in transport and communications infrastructure. It was assumed that these measures would help the zone of colonized development to reduce its economic distance from the zone of integrated development. To help decentralize development, resource mobilization was to be systematized through a regional scheme made up of four specific zones ("northern", "central", "central-south", and "south") and a national system of 11 planning regions and Greater Santiago.[25]

Although the Popular Unity's perception of Chile's urban/regional synthesis was explained in terms of core-periphery dependent relationships, the model of resource mobilization toward regional development did not differ much from the growth poles strategy advanced by the Christian Democrats.

A central element in the Unidad Popular's strategy was the concentration of industrialization efforts on existing points of intensive economic activity, while relying on the urban network for diffusion of its effects. In any case, the economic development of the region of colonized development was to be founded primarily on metal or ore production,[26] energy production,[27] and high-technology industrial processing of fisheries and lumber.[28] Such activities

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[26]Antofagasta-Calama-Tocopilla with nitrate and copper; Copiapó and Vallenar with iron ore.

[27]Oil at Manantiales, in the province of Magallanes.

[28]Iquique, with fisheries; Coyhaique-Puerto Aysén, with lumber.

could not be claimed as having much of a multiplier effect on regional economies for they would employ few and have mostly extra-regional linkages.[29]

Eventually, Allende's approach to regional development did not have a chance to be fully implemented. In the following three years after his election in 1970, Allende's fiscal and economic policies, although socially just in the short run and in many respects overdue, had a negative impact on the economy. Domestic productive sectors declined and shortages of consumer goods, food, and manufactured products became widespread. Inflation exceeded 500 percent in 1973. By this time, the polarization of Chilean society into those who supported Allende's policies and those who opposed them finally resulted in a military coup d'etat which overthrew Allende and replaced him with a right-wing military Junta.

The Junta inherited an economy in shambles. Triple digit inflation, exhaustion of foreign exchange reserves, declining gross domestic product, absence of private investment, and scarcities of materials and consumer goods all were features of the 1973 Chilean economy. On taking power, the military brought forth major changes in the direction of national economic objectives. In their view, in the pursuit of import-substitution development, the country had neglected its comparative advantages to produce for international markets. High tariffs, overvalued exchanged rates, and other special protectionist concessions granted to import-substitution

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[29]"This is the degree to which regional income increases regional savings, which in turn increase regional investment and expand the production capacity of the region." Stohr, op. cit., p. 88.

industry had stimulated the unfolding of a small-scale, uncompetitive and inefficient production structure. These conditions had discouraged firms from taking full advantage of economies of scale in the production of goods eventually exportable. These same conditions had facilitated the proliferation of consumer goods industries, especially non-durable, which, given the restricted effective demand, found little incentive either to expand or to assimilate the technology needed to attain international competition efficiency levels.

Furthermore, the above conditions had impeded the emergence of alternative export products other than copper in any sizable amount. Thus, instead of reducing dependence on copper exports, import substitution had provided dependence an additional stimulus. In short, the expansion of economic activity through state-protected substitution of imports might have been successful for large, heavily-populated countries with suitable resource endowments. However, this was not the case in Chile. In view of its geographic location in Latin America, its size, and its abundant natural resources, the most sensible development approach would have been an "open door" trade policy with the export sector as the "engine" of growth.

In line with this perspective, the military chose as an alternative to development a strategy based on the promotion of exports,[30]

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[30]This aspect of the military's approach to development is highlighted by the Times of the Americas as follows: "The success of this (promotion of non-traditional exports) strategy is revealed in the significant shift in the composition of Chilean exports since 1973. PROCHILE (Chile's official government export promotion agency) notes that copper represented 82 percent of total foreign sales in 1973, but only 56 percent in 1976. According to more recent data, by the end of 1977 copper exports shrank to 54 percent of total shipments and non-copper exports soared from 25 percent in 1973 to 46 percent in 1977. Copper sales were down $119 million in 1977, as its average price fell from about 63 cents per pound in 1976 to 59.5. Processed wood, fresh fruit and basic metal products have generated the sharp expansion in non-copper exports since 1973". The Times of the Americas. June 21, 1978, p. 5.

particularly the non-traditional categories,[31] along with a drastic reduction in the level of protection. Insofar as the problems which arose from an inwardly-oriented economy could be attributed to a neglect of comparative advantage, a more liberal trade policy would introduce a competitive element, forcing Chilean businessmen, farmers and workers to improve productivity and reduce costs in order to meet foreign competition.

The interest of the military government on export diversification also stemmed from another concern. This was the view that import substitution had accentuated the trend toward urban/regional imbalance in population and resources as well as inequalities in well-being. Continuation of this trend, in the light of such determinants of urban growth as population growth and urban expansion, would only succeed in frustrating efforts directed toward overall national development. Consequently, the new policy called for a shift from import substitution as the chief element of Chile's drive to development, to a strategy based on export diversification. The new policy would redirect in intensity and orientation existing urban/regional growth determinants to restructure the urban/regional system, and correct economic imbalances while geared to the central objectives of economic growth and modernization. The practical considerations in executing the new policy were embodied in the Regional Development Act of 1974.

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[31]All items other than copper, nitrate, iodine, molybdenum, fishmeal, cellulose and paper.

CHAPTER VI

Chile's Urban-Regional Imbalances
A New Perspective in National Development

In general, the Regional Development Act of 1974[1] defines policies and instruments to promote urban/regional development, and stipulates the role of the urban/regional development process in overall national development.[2] The principal objective of the Regional Development Act is to reduce urban/regional imbalances in the distribution of resources and activities in order to help overcome problems of urban overpopulation, economic imbalance and pockets of extreme poverty.

In pursuit of this objective, emphasis is placed on the redistribution of people and jobs throughout the national territory and on the geographic decentralization of decision making. This has led to the implementation of two main lines of action: a) the diversification of commodity exports; and b) the decentralization of the state administrative apparatus. It is anticipated that the combined effect of these policies will also help extend national sovereignty to border areas, formulated both in terms of economic accessibility of border areas to the national market, and the participation of the population of border areas in the national development process.

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[1]República de Chile. Presidencia de la República. Decree Law 575, July 11, 1974. For a detailed discussion of the legal and technical foundations of the Regional Development Act see Comisión Nacional de la Reforma Administrativa (CONARA), Chile Hacia un Nuevo Destino: Su Reforma Administrativa Integral y el Proceso de Regionalización, Documento 2. Santiago, Junio de 1976; and Oficina de Planificación Nacional (ODEPLAN), Estrategia Nacional de Desarrollo Regional 1976-1990. Santiago, Agosto de 1975. Five Volumes.

[2]The objectives of the Regional Development Act are incorporated into the framework of the 1976-1981 Indicative National Development Plan. In addition, these objectives are also included in the so-called Estrategia Nacional de Desarrollo, Chile's long-term planning scheme for development. See El Mercurio, October 5, 1977.

The export diversification approach classifies the economic activities of any given region into three types: 1) primary, 2) secondary, and 3) tertiary.[3] The primary economic activity of a region is assumed to be that which serves a market larger than the region itself. That is, the primary activity of a region is considered to be its "export" activity, and also its economic base (or its basic activities). Growth of the basic activity of any given region is assumed to be the motivating force behind growth of that region. This growth brings in money from the outside which recirculates within the region and generates more income. If the region's basic activity grows, so does all other activity. Conversely, if the basic activity declines, all other activity declines with it.

The secondary activity of a region is made up mainly of supporting activity for the primary activity: raw materials processors and processors of by-products of the primary activity. Tertiary activity is composed of a variety of activities which support both primary and secondary activity such as services industries and retail trade.

The basic assumption of export diversification is that the relative and absolute increase of a region's external trade will stimulate a number of trends toward reducing urban/regional imbalances in the distribution of resources and activities:

1. It will direct economic activity away from centers traditionally attractive to resources and population such as the Metropolitan Region,

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[3]For an analysis of the value of export diversification for guiding public policy aimed at affecting urban/regional growth see Douglass C. North, "Location Theory and Regional Economic Growth", Journal of Political Economy, 63 (June, 1955), no. 3, pp. 243-258. Also, Charles M. Tiebout, "Exports and Regional Economic Growth", in John Friedmann and William Alonso, ed., Regional Development and Planning. A Reader, (Cambridge, Mass.: M.I.T. Press, 1964, pp. 256-264.

since regional production will compete directly in international markets.

2. Regional external markets will be created.

3. There will be more efficient utilization of small-scale economies by regional industries.

4. Increased regional productivity will result with the adoption of advanced technologies.

5. Interregional trade will expand, especially among those regions lacking transport connections with national markets or comparative advantages to international production.

6. Greater interregional exchange and circulation of factors associated with foreign trade will occur, particularly labor.

7. The local manufacturing of items which have hitherto not been produced for lack of a domestic market, such as copper manufacturing industries, will be economically feasible through participation in international markets.

On the general assumption that cities as components of a national system of cities may serve as permanent transmitting agents of developmental impulses, the Regional Development Act ascribes the national urban system a central role in the implementation of the export diversification approach. To this end, Chile's urban centers are ranked into a composite of population centers operating at different levels of complexity,[4] and shaping, in the aggregate, the country's urban/regional structure. Within this context, the national urban system is called to perform intraregional and interregional functions.

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[4]a) Basic sub-system, or the city and its surroundings; b) micro-regional system; c) regional system; and d) national system.

The intraregional function relates to the city's role as nodes of interaction between intraregional activities, as location of services for the cities' hinterland, and as mechanisms for the articulation of factors promoting development from inside the region and the internalization of those from outside the region. The interregional function is concerned with the cities as components of a national system of cities through which most interaction between regions takes place. In this respect, the urban system acts as a collecting and trans-shipment instrument for hinterland products destined for national and international markets. It also serves, inversely, with distribution centers for equipment produced elsewhere but needed for production in the hinterland.

Depending on the existence of such preconditions as "the ability of a region to participate in a market economy, availability of local and regional infrastructures, qualified manpower, (and) capacity for social and institutional innovation",[5] some areas may be more responsive than others to setting off a process of development which in time can become self-sustaining. In order that the effects of export diversification bear on areas which can best ensure the setting off of such a process, the Regional Development Act defines the following spatial instruments:

1. Growth poles or primary centers of production and consumption at the interregional level. These are urban centers which possess a diversified economic structure and are capable either of spontaneous growth in economic activity or of potential growth which could, if required,

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[5]Walter Stohr, Regional Development Experiences and Prospects in Latin America, (The Hague: Mouton, 1975), p. 64.

be stimulated by government intervention. The aim of growth poles is to act as "draught horses" to the socio-economic progress of their associated hinterland.[6]

2. Intermediate-size growth poles or secondary centers of production and consumption at the intraregional level. The specialization of secondary centers in the production of goods and services linked to local natural resources will promote intraregional trade and help raise regional income. Furthermore, increased state investment in secondary centers with growth potential near rural areas will help to render these centers as a migration alternative to big cities.[7]

3. "Satellite" cities or towns in the areas immediate to Santiago. The strengthening of these centers is to alleviate congestion in the capital city, to rationalize its growth, and to weaken the tendency toward concentration in this city.[8]

Parallel to the lines of action of export diversification, the geographic decentralization of decision-making represents a second approach of the Regional Development Act to the amelioration of urban/-regional imbalances in Chile. This approach also represents the recognition that the relationship between central government and local government and their respective powers and authority is of fundamental importance to urban/regional development. Other major motives for the decentralization of decision-making can also be discerned.

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[6]Arica, Valparaíso, Concepción, Puerto Montt and Punta Arenas.

[7]Most medium-size urban centers in the Central Interregional System fall in this category.

[8]Rancagua, Valparaíso, Quillota, Calera, San Felipe and Los Andes.

One reason is the inadequacy of the country's form of government and decision-making structure to provide scope for the inhabitants of the regions to participate in the decisions affecting their livelihoods and well-being. The Constitution of 1925 organized the country's political and administrative apparatus into a system of provinces, departments, subdelegations and districts, the district being the basic unit of local government. Theoretically, each of the provinces (25 in total) constituted an intermediary organ of government between the central government authorities and those of the local government. In practice, the central government's tight control of decision making, the legal restrictions preventing local fiscal innovation, and the rigidity of central budgetary regulations left little scope for consultation and decision making at the provincial and local levels.

One result of this situation was that agencies of the central government increasingly assumed the provincial and local responsibilities outlined in the Constitution of 1925.[9] Another result was that, due to the fact that the centralizing forces imbedded in the decision making structure converged toward Santiago, the seat of the central government, this city strengthened its traditional pull on the country's resources and activities. On the other hand, the overcentralization of decision

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[9]For instance, Article 105 of the Constitution of 1925 stated that municipalities were to take care of elementary schools and other educational services supported by municipal funds. Frederick Weaver illustrates the failure of municipalities to fulfill this responsibility as follows: "Between 1954 and 1957 the number of municipal primary day schools for children dropped from 25 to 16, and between 1954 and 1961 the number of children enrolled in these schools declined from 1076 to 124. Between 1955 and 1957 the number of municipal night primary schools dropped from 24 to 12, attendance fell over twenty percent". Frederic Weaver, Regional Patterns of Economic Change in Chile, 1950-1964, (Ithaca, N. Y.: Cornell University Press, Dissertation Series no. 11, June, 1968). p. 26.

making, resources and activities at the national level relegated local government and officials to the position of "political brokers" engaged in extracting resources from Santiago.[10] In sum, local and provincial governments did not amount to decision-making units in any meaningful sense.

The decentralization of decision making therefore arose not only as a means to counter the gravitational pull of the capital city, but also as a way to provide local government with functions of decision making, financing and participation. In keeping with this perspective the Regional Development Act defines a new order of internal administration and creates new administrative bodies.[11]

The new system of decision-making is made up of 13 "regions",[12] including the Metropolitan Region of Santiago (see Table VI-1). The system is based on the re-grouping of the existing 25 provinces mainly on the bases of demographic and economic criteria, but also on historical

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[10]Arturo Valenzuela, Political Brokers in Chile: Local Government in a Centralized Polity, (Durham: University of North Carolina Press, 1977).

[11]The following decree laws complement the legal bases for the decision making and administrative reforms institutionalized in the Regional Development Act: Decree Law 212 of December 17, 1973 (creates the Comisión Nacional de la Reforma Administrative CONARA, or National Commission for Administrative Reform); Decree Law 573 of July 8, 1974 (recognizes the right of regions to exercise control over their budgets); Decree Law 575 of July 11, 1974 (ends the country's system of internal administration that dated from 1925); Decree Law 1263, November 28, 1975 (defines the financial administration of the public sector); and Decree Law 1289, January 14, 1976 (Law of Municipalities).

[12]For purposes of administrative decentralization, a region is defined as a spatial unit of the national territory administered by agencies of the central government. República de Chile. Contraloría General de la República. Comité de Desarrollo Regional. Estructura Institucional para el Desarrollo Regional, Documento 2. Santiago, 1975, p. 15.

grounds. Each region is divided into at least one province or "micro-region",[13] and the provinces into municipalities. Municipalities represent the basic organization unit at the communal level.

On the other hand, the Regional Development Act creates new institutions to help focus the economic decision making and general well-being problems which lie between the local authority and the national level. Some of these institutions are concerned with the planning and coordination of urban/regional policies and administration at central government level. Others operate in the regions themselves.

On the national level, in the absence of delegation of power to a national parliament, effective decision making on matters of national government and administration is vested in the Executive Office. A Planning and Coordination Department refers national and regional matters to the Executive Office. The Ministry of the Interior (General Administration) completes the administrative structure at this level; it is in charge of executing central government directives (see Table VI-2).

On the regional, provincial and municipal levels, the coordination and planning of urban/regional policy and administration is centered on a bureaucratic apparatus organized in hierarchical sequence. The chief decision-maker in this structure is the Intendente, or Regional Governor, directly appointed by the Executive. The Intendente is the direct representative of the central government in the region and, as such, his

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[13]A microregion is a geographic environment of differentiated productive characteristics which help support a distribution of towns and cities of varying sizes, organized around and intercommunicated with their main urban center through a system of roads and routes. Contraloría General de la República, op. cit., p. 15.

authority filters down to the provincial and municipal levels, personnel, and public services. The duties of the Intendente are to implement planning and policies in urban/regional development, to advise in the regional implications of national policies, to determine priorities for regional investment, and to resolve policy projects, development plans, and the regional budget.

The Intendente also serves as a connecting link between the regional public and private sectors. In this work, the Intendente acts in consultation with three types of technical assistance: a) the Secretaría Regional de Planificación y Coordinación (SERPLAC), or Regional Planning and Coordination Office; b) the Consejo Regional de Desarrollo, or Regional Council for Development; and c) the regional branches of the central ministries.

SERPLAC is the regional branch of the National Planning Office (ODEPLAN). SERPLAC assists in the technical aspects of regional planning, budget formulation, and policy projects. The Regional Council for Development evaluates demands from the private, public and labor sectors of the region as well as those posed by the provincial governor(s). The regional branches of the central ministries advise on regional policies which fall within their scope of action and help to draft the regional budget pertaining to their respective sectors.

The provincial governor, also appointed by the Executive, coordinates and implements development planning and policies at the provincial and communal levels. The provincial governor also supervises the proper functioning of public services. Provincial Planning and Coordination Committees perform functions similar to those of SERPLAC. The municipal

mayor completes the administrative structure. The Communal Council for Development, composed of the chiefs of municipal services and representatives of main community activities, provides links between this layer of government and the community.

To provide sources of financing to regional and municipal government, the Regional Development Act stipulates a number of instruments and incentives. Two major fiscal mechanisms are the National Fund for Regional Development and the Fund for the Financing of Municipalities. Five percent of the total revenues resulting from income taxes and custom duties receipts will go to the National Fund for Regional Development. Similarly, five percent of the nationally-levied land and fixed capital tax will go to the Fund for the Financing of Municipalities.[14]

Assistance from the National Fund for Regional Development mainly takes the form of low interest loans. However, grants can also be allocated for specific purposes. For instance, in view of persistent unemployment, population loss, and major decline in economic activity, a region may be declared a "depressed region". The National Fund for Regional Development can provide depressed regions with grants for a specific number of years, which can be extended depending on the region's needs.

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[14]Municipalities are not strictly city organizations such as the term denotes in the United States, but are closer to U.S. counties in that they are contiguous and embrace urban and rural areas. In addition to the benefits accruing from the Fund for the Financing of Municipalities, municipalities retain their regular sources of income such as the yields from a variety of municipal services and taxes and the tax-sharing of nationally-levied taxes.

Special financial and economic considerations are also provided to the northern and southern extremes of Chile to compensate for their extremely remote location from the national capital. The aim is to maintain these areas as an integral part of the national territory.[15] In addition to state investments in transport and communications,[16] "free zones" managed by the private sector are to be created in Iquique and Punta Arenas.[17]

To help decentralize economic activity from the Metropolitan Region, the Regional Development Act includes a number of measures. The principal incentives offered to industrialists to move or to expand in regions other than the Metropolitan Region are investment grants, total or partial tax exemptions for a number of years on industrial profits, and duty free import of capital goods. Furthermore, indemnity bonuses are provided to compensate for the additional expenses involved when choosing a depressed area for location.

[15]The need to integrate the northern and southern extremes is further emphasized by border disputes over these areas. In the north, Arica is the center of a dispute between Chile and the demand from Bolivia for an outlet to the Pacific Ocean. In the south, there is a jurisdictional controversy with Argentina over the Beagle Channel.

[16]A new, planned Southern Highway which will connect Puerto Montt (Region X) with Coyhaique (Region XI), 300 miles south of Puerto Montt, is currently under construction. The highway is expected to eliminate some of the isolation of Region XI, a frontier zone in the true sense of the term, rich in natural resources, and comprising 14 percent of national land surface. See Corporación de Fomento de la Producción, Chile Economic News, New York, August, 1978.

[17]Contratry to the temporary, artifically induced development from "free ports", the free zones are designed to promote permanent development by providing incentives for the establishment of industrial concerns within the zone, thereby expanding the job market. All types of merchandise may enter or leave without restrictions. See La Tercera, August 12, 1976.

In the social area, the Regional Development Act extends national programs of education, health, housing and social security to the regions. The guide to social action is provided by the so-called "Map of the Extreme Poverty", elaborated by the National Planning Office on the basis of the 1970 census. The map points out that about forty percent of the Chilean population is statistically poor or lives on the border of poverty.[18] Twenty-three percent of the Chileans live in "extreme poverty", that is, about one out of four Chileans. Half of the population in extreme poverty is younger than sixteen years of age.[19]

To help ameliorate the effects of poverty, the Regional Development Act defines a series of social programs.[20] Regional educational programs, for instance, refer to the allocation of resources to expand basic education in rural and remote areas. These programs are to concentrate on teaching skills appropriate to the kinds of work available to students in the area upon leaving school. Regional health programs emphasize the establishment of medical centers at the periphery of urban

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[18]See the article "Chile Claims it is Reaching the Poor", in Diario de las Américas, October 15, 1975.

[19]Chilegram, 4(January, 1977), no. 19, pp. 3-4.

[20]Some programs of food aid, minimum family incomes, and a form of minimum employment complement the Regional Development Act. In May, 1975, for instance, "a subsidy equivalent to 50% of the minimum wage for each person hired by an enterprise over its number of employees reported in March, 1975 was instituted, thus encouraging the employment of additional personnel. The number of workers benefiting from this system reached an annual total in 1978 of more than 300,000 people monthly." Corporación de Fomento de la Producción (CORFO), Chile Economic News, New York, February, 1979, p. 4.

centers and in rural areas in order to make medical services available to those populations. In addition, increased attention is to be paid to nutrition programs to help solve the problem of malnutrition among the youngsters classified as living in extreme poverty.

Having defined policies and instruments that should promote urban/regional development, the Regional Development Act postulates that, starting from an initial context of urban/regional imbalances in the distribution of resources and activities, the maturing of the development process based on export diversification and the gecgraphic decentralization of decision making will bring about a convergence toward urban/regional homogeneity in the distribution of resources and activities. The question is: will the Regional Development Act accomplish such an objective?

It should be pointed out that Chile's model for spatial development is still at a formative stage. To assess its immediate impact in the attainment of the goal stated above is premature. However, from an evaluation of its policy objectives and instruments, an estimate of its potential to provide the conditions conducive to reducing Chile's urban/regional imbalances can be made.

The principal objective of Chile's Regional Development Act, as previously discussed, is to reduce urban/regional imbalances in the distribution of resources and activities so as to help overcome

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[21] In 1978, "27,000 tons of milk and enriched baby foods were distributed. Some US $26 million were granted to the National Council of School and Scholarship Aid to finance food for students from low-income families. Food is also being distributed in kindergartens and centers that have been opened to treat children suffering from malnutrition." CORFO, op. cit., p. 5.

problems of urban overpopulation, economic imbalance and pockets of extreme poverty. One of the keys to this objective is a strategy based on the diversification of regional exports. Export diversification assumes that a region can grow if its basic activities grow. The activities which serve a market larger than the region itself are considered to be the region's "export" or "basic" activities.

One specific goal of the export diversification approach is that the relative and absolute increase of regional basic activities will help offset, if not halt, the traditional agglomeration of economic activity and population settlement in the country's Metropolitan Region. The remaining part of this chapter will attempt to estimate the validity of this assumption.

Taking as a basis for the following analysis the variable "employment in manufacturing",[22] the presumption here is that due to the uneven distribution of basic manufacturing activities throughout the national territory, the policy of export diversification will reinforce rather than weaken the traditional pull on resources and activities of the Metropolitan Region. The reason for the selection of manufacturing activities in this analysis is that the data on the employment generated by Chile's manufacturing sector appear sufficiently disaggregated at the regional level.

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[22]The United States Department of Commerce defines "manufacturing" as follows: Manufacturing is the mechanical or chemical transformation of inorganic substances into new products. The assembly of component parts of products is also considered to be manufacturing if the resulting product is neither a structure nor other fixed component. These activities are usually carried on in plants, factories, or mills, which characteristically use power-driven machines and materials-handling equipment. United States Department of Commerce. Bureau of the Census, 1972 Census of Manufacturing, Washington, D. C., 1976, p. XVI.

The method of analysis is the location quotient, defined as "the excess employment in local industries where an industry's share of the total employment is greater than the national average."[23] The purpose of the method is two-fold. First, to identify the manufacturing activities which can be considered as "export" or "basic" activities.[24] Second, to estimate the distribution of basic manufacturing activities in Chile's national territory. The assumption here is that the uneven distribution of basic manufacturing activities in space will be reflected in the strengthening of the pull on resources and activities of the Metropolitan Region. Table VI-3 classifies Chile's manufacturing sector into 20 activities. Table VI-4 identifies the country's regions. Table VI-5 distributes the employment generated by these activities by region.[25]

The simple identification of which sectors are "filled" in a region and which are "empty" provides a quick estimate of the composition and degree of specialization in manufacturing activities in any given region. Column I, for instance, shows that the composition of manufacturing activities of Region I includes all twenty activities but five. The column also suggests that Region I is specialized in activities 200 and 380 since these

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[23]Ian Masser, Analytical Models for Urban and Regional Planning, (Devon, England: David & Charles Publishers, 1972), p. 66.

[24]If the location quotient (Q) is equal or less than 1, then the proportion of employment generated by a given sector in a region does not exceed the proportion of employment generated by this same sector at the national level. Consequently, the sectoral activity does not serve a market larger than the regional market; hence, the sectoral activity is not a "basic" activity. If Q is greater than 1, then the sectoral activity is an export activity.

[25]Activity 200, "Food Manufacturing", for instance, generates 2,930 jobs in Region I, 1,379 in Region II and 2,254, in Region IX. Column "total" shows that activity 200 generates 56,865 jobs in the country as a whole.

are the two largest activities or employers in the region. This measure of specialization based on the size of activities is the region's absolute specialization. The measure refers to the activities in a region which generate the greatest number of jobs. This is an intraregional measure of specialization. Table VI-6 summarizes the absolute specialization in manufacturing activities of Chile's regions.

Table VI-6 reveals that, in absolute terms, activities 200 and 250 are the two largest activities in a number of regions. Activity 200 is the main source of employment in 9 out of 12 regions. Activity 250 is the largest activity in Region IX and the second or third largest in five additional regions. Activity 380 appears as the second or third largest activity in seven regions. Finally, activities 310 and 230 represent the main sources of employment in Region II and the Metropolitan Region, respectively.

The measure of absolute specialization of a particular region can be compared to the measure of absolute specialization of any other region. Such a comparison confers to the measure of absolute specialization an interregional, relative dimension. More important, since the comparison can be made between one particular region and each of the remaining regions, the final effect amounts to comparing one region with the country as a whole.

In this situation, the composition and degree of specialization of a region will be associated with the activities which possess a larger size at the regional level than at the national level. In other words, a region is now specialized in those activities which generate more jobs at the regional level than at the national level.

The next step in this analysis therefore is to identify the regions which possess a higher than "average" percentage of their employment in a particular manufacturing activity.

This is done by computing the contribution to regional employment by a given activity to total regional employment. Activity 200, for instance, generates 2,930 jobs in Region I or 33.4 percent of total regional employment. On the national level, activity 200 generates 56,865 jobs or 17.7 percent of the total national employment in manufacturing. Since the contribution to employment of activity 200 is greater in Region I than at the national level, Region I is therefore relatively specialized in activity 200. Table VI-7 shows the relative specialization in manufacturing activities for all regions. Table VI-8 summarizes the data.

Table VI-8 reveals that the absolute and relative measures of specialization are the same in at least seven regions. The Metropolitan Region, for instance, appears specialized in activities 230 and 240 both in absolute and relative terms. Consequently, the Metropolitan Region is specialized in activities 230 and 240 at both the regional and national levels.

Table VI-8 further reveals that eight of the nine regions possessing absolute specialization in activity 200 are also specialized in this same activity in relative terms. Region VII moved from an absolute specialization in activity 200 to a relative specialization in activity 340 even though activity 340 provides the second largest source of employment in absolute terms. Regions II and IX appear specialized in activities 310 and 250, respectively,

both in absolute and relative terms. Finally, all regions exhibit relative specialization in several manufacturing activities.

What is needed at this point is a measure of the excess employment in a particular manufacturing activity in any given region in relation to the national average. This measure is the location quotient, computed as a proportion of the relative specialization of region "j" in activity "i" and the corresponding relative specialization of region "j" in activity "i" at the national level.[26] This measure will also serve to identify "export" manufacturing activities in a particular region. If the location quotient is greater than 1 for a given activity, then this activity is very likely the basic industry for the region.

Table VI-9 shows that the Metropolitan Region possesses twelve out of twenty possible location quotients greater than one. This means that 65 percent of the manufacturing activities in the Metropolitan Region can be considered to be export activities. Regions VIII and VII emerge with 45 and 35 percent of their activities classified as export activities. Regions IV, V, and VI appear with 30 percent each. The remaining regions possess less than 30 percent of their manufacturing activities identified as export activities.

The emerging picture contradicts the assumption that the relative and absolute increase of regional basic activities will help offset, if not halt, the traditional agglomeration of economic

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[26]For instance, the relative specialization of Region I in activity 200 is 33.4 and 17.7 percent at the regional and national levels, respectively. The location quotient is 33.4/17.7 or 1.89. Perfectly proportionate employment therefore results in a Q of 1.00.

activity and population settlement in the country's Metropolitan Region. At least in terms of basic manufacturing activities, the data indicate that the Metropolitan Region not only possesses the highest number of basic manufacturing activities, but also that the Metropolitan Region has the most diversified manufacturing structure for export activity. This, in turn, means that the Metropolitan Region is most likely to provide firms with such comparative advantages for industrial location as availability of skilled labor, infrastructure, the proximity of secondary and tertiary industries and access to raw materials and markets.

It should be pointed out that the method of location quotient has a serious shortcoming which definitely limits its usefulness in the identification of regional basic activities. The method does not take into account the factors which may influence each region in relation to its particular basic activity structure. One factor is that, over given periods of time, some industries tend to grow relatively rapidly on a national basis, while others tend to decline. Whether or not an industry is classified as a "basic" industry depends on shifts in national and world demand for the product of that industry.

On the other hand, the competitive position of the given region within the national industries that are represented inside its borders may influence its particular basic activity structure. A particular region may at one point in time have a fairly large share of a particular national industry; over time, however, it may lose a part of its share of the total, or may gain a larger share. Availability and cost of resources, transportation, and changes in

location of markets are reasons for these gains or losses.

Considering these two forces, it is possible for a region to experience growth in its overall economy, even though it may experience declining relative shares within each of its industries. This occurs because of growth of some basic activities within the industrial structure. On the other hand, a region may grow by increasing its relative shares of the industries that it has, even though they are stable or declining industries. Similarly, a region may decline by losing relative shares of its industry or by having a heavy concentration of declining industry.

The shift-share approach provides a means of describing and analyzing changes which have taken place in a region in the past. It is based on the fact that economic growth, or lack of it, within a given region, is dependent partly on local, national, and world shifts in demand for the products of various industries, and also partly upon a region's ability to compete--as a result of its location, the availability and costs of its resources, and other related factors--for its share of the market demand.

The Revista Latinoamericana de Estudios Urbano Regionales published in 1974 the results of a shift-share analysis of Chile's manufacturing sector for the 1957-67 interval.[27] The study concludes that, due to variations in the regions' "share" of the national industry groups, a number of manufacturing activities shifted from

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[27]Alejandro Gómez, "El Proceso de Localización Industrial en Chile: Análisis y Políticas", Revista Latinoamericana de Estudios Urbano Regionales, 3 (May, 1974), no. 9, pp. 9-56.

a basic to a non-basic standing over the 1957-67 interval. Much of the shift in standing was explained by an increase in the share of national industry groups in the Metropolitan Region, especially in industries oriented toward "external economies",[28] and industries oriented by "inertia or tradition."[29]

Competitive gains by the Metropolitan Region in terms of availability and costs of resources and changes in demand for the product of the industries stated above influenced the exodus of these industries to the Metropolitan Region. The tendency of industries oriented toward "external economies" to locate in the Metropolitan Region, for instance, was on the order of 4 to 1 in the 1957-67 interval. Region IV, and the city of Valparaíso in Region IV above all, experienced the greatest decline in the "share" of the national industry groups and, by extension, in the number of basic manufacturing activities.

What the location quotient and the shift-share analysis techniques reveal is that, at least in terms of manufacturing activities, the differential distribution of export manufacturing activities in

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[28]Industries oriented toward external economies are defined in this study as the producers of products whose inputs are received from industry and whose output is sold to industry. Rubber products and chemical product industries are examples. Total costs are minimized by a location that provides maximum access to both suppliers and buyers and a large pool of skilled people, i.e., an industrial complex location.

[29]The industries in this group produce a finished product and are, therefore, concerned with maintaining a favorable location with regard to regional population distribution and/or market potential. The resultant location tends to be in the largest regional market. The automobile industry is an example. The tendency for industries oriented by inertia or tradition to locate in the Metropolitan Region was such that 4 out of 5 new jobs created by this type of industry were in the Metropolitan Region over the 1957-67 interval.

the country's territory will strengthen rather than reduce the pull on resources and activities of the Metropolitan Region. To the extent that the Metropolitan Region provides firms with more favorable advantages for location than other regions, particularly in terms of markets, infrastructure, and skilled labor, it is not likely that firms will seek location elsewhere. This situation raises one question for future research. What is the effectiveness of the special economic and fiscal incentives provided by the Regional Development Act to help decentralize economic activity from the Metropolitan Region? Would economic and fiscal sanctions rather than incentives be more effective in the decentralization of economic activity from Santiago? If so, what kind of sanctions could be implemented?

The above observation represents one in a series of shortcomings of the export diversification approach to regional and urban development. The chief weakness of export diversification is the assumption that urban/regional development must stem from forces outside the region. On this assumption, Charles Tiebout makes the following comment:

> There is no reason to assume that exports are the sole or even the most important autonomous variable determining regional income. Such other items as business investment, government expenditures, and the volume of residential construction may be just as autonomous with respect to regional income as are exports.[30]

On the other hand, Mario Rothschild makes the following comment on

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[30]Charles Tiebout "Exports and Regional Economic Growth", in John Friedmann and William Alonso, eds., Regional Development and Planning. A Reader, (Cambridge, Mass.: M.I.T. Press, 1964), p. 257.

the extent of economic opportunity losses caused by concentration of activity in a limited number of basic activities in Chile:

> ...The large, highly technological and profitable copper mining activities in the northern regions of Chile, and the less rich, but equally concentrated and similarly "technological" coal mining activities in the south of the country have definitely not "spread-out" and acted as a multiplying factor in these regions.[31]

What happens if a region's best comparative advantage for export production lies in a "basic" activity which is not in great demand? What if technological breakthroughs render a basic activity obsolete?[32] What if a region depletes its export base? A study of Chile's levels of land productivity and utilization reveals that Regions VI and VII are the country's agricultural regions par excellence. However, in connection with land and manpower productivity, Regions VI and VII possess the lowest levels of both land and manpower productivity.[33] The study concludes that one of the major factors underlying poor productivity levels is depletion of the regions' fundamental export base, i.e., soil.[34]

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[31]Mario Rothschild, Regional Development and Sectoral Specialization: The Chilean Case, (Ithaca, N. Y.: Cornell University Press, Latin American Program. Dissertation Series no. 50. January, 1973), pp. 89-90.

[32]This event actually occurred with regards to the nitrate export activity of Regions I and II following the invention by Germany of a cheaper, synthetic substitute after World War I.

[33]Chile. National Planning Office, Relación Oferta Demanda de Mano de Obra Agropecuaria y Forestal por Unidad de Superficie 1970. Santiago, Junio, 1975.

[34]Considering that, according to this same study, Regions VI and VII reveal an excess of agricultural labor force greater than any other region, the inescapable conclusion is that, barring changes in the structure of these regions' agricultural structure such as technological soil improvements, the populations of Regions VI and VII must do what they have done so far successfully; that is, they must migrate.

Assuming that a region's export structure finds favorable demand for its products, the presumption that only basic activities will generate regional development underestimates an important restriction to production for export. This is the concept of "economic value". The discussion on the relationship between economic value and natural resources exploitation illustrates the concept.

The term "natural resource" refers to elements, products or forces which man finds in his environment and which he can enjoy for his benefit. Some of these resources are "natural products" such as minerals, forests, fish and water; others are "natural conditions" as waterfalls, river routes, natural harbors and fertile soils. The distinction between "natural products" and "natural conditions" is critical because natural conditions are nature's gifts whose structure may need little modification to suit human needs. By contrast, natural products must be earned by the application of capital, labor and technology. This is precisely what determines the actual or potential "economic value" of such natural resources and, by extension, its actual or potential value as an export activity. In this context therefore economic value means the end product obtained from the application of capital, labor and technology to a unit of a particular natural resource.

On the other hand, a variety of production alternatives and levels of technology can be applied in the exploitation of a particular natural resource. However, such alternatives are likely to occur in regions "rich" in that particular resource and in such factors as the availability of capital, skilled labor and infrastructure. To be sure, "poor" regions may produce just as much as

"rich" regions but at a higher technological level, capital investment and labor cost. The aforementioned study of Chile's land productivity and utilization helps to illustrate this point.

Despite problems of social erosion, Regions VI and VII contain most of the country's potentially arable land. Although the problem of soil erosion may inhibit agricultural production for export in the actual and potential areas of cultivation, the combination of favorable climatic conditions, appropriate soil chemistry and abundant water resources allow Regions VI and VII the possibility to switch to forestal and grassland activities. On the other hand, the arable land of Regions I, II and III can be increased from 20,300 to 42,800 hectares by the incorporation of potentially arable land. However, the poor quality of soil and the chronic deficit of water typical of these regions dictate that any extension of the currently cultivated area will require huge capital investment. Unless the capital investment is made, no alternatives exist for these regions to switch to forestal on grassland activities.

The case of sulphur resources in Region II further illustrates the restriction placed by the concept of "economic value" on activities with "basic" potential. Despite the existence of favorable international demand for the high-content sulphur deposits of Region II, the location of these deposits high in the Andean mountains and at considerable distance from the nearest port of exit to international markets render sulphur costs of exploitation prohibitive. As a result, at least in the near future, sulphur will not contribute to the development of Region II.

Participation of the regional economy in the international economic fabric, and vulnerability to the vagaries of international

commodity prices, represent additional restrictions to the assumption that a region can grow by way of its "basic" activities. Nowhere in the Regional Development Act is there a suggestion that the region's export activity will have to meet, match, and ultimately surpass the external competiton from larger, more technologically advanced producers. Nor is there the recognition that producing for extermal markets means that demand is also external and therefore cannot be controlled by the region. Similar restriction applies to prices in the world commodity markets.

On the other hand, the internationalization of regional economies places the national economic system before the uncertainty and instability of world commodity markets. The case of wheat exports in the 1850-1930 interval illustrates this. Markos Mamalakis puts it as follows:

> Wheat exports imparted to the (economic) system some of the great instability that characterized it between 1850 and 1930. In 1878 wheat exports fell to less than 25 percent of the 1874 level, and the decline in 1890, if compared to the cyclical peak of 1885, was even worse. Most contractions were violent. The booms were as extraordinary in magnitude as the sudden declines were in intensity.[35]

Copper exports, which traditionally represent two-thirds of Chile's exports, is another case in point. The Inter-American Development Bank provides the following observation:

> ...In 1975 copper reached only 55.9 cents per pound against an annual average of 97.8 cents during 1965-74 at constant 1975 prices, generating smaller receipts from copper exports.[36]

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[35]Markos Mamalakis, The Growth and Structure of the Chilean Economy: From Independence to Allende, (New Haven: Yale University Press, 1976), p. 37.

[36]Inter-American Development Bank, Economic and Social Progress in Latin America, 1976 Report. Washington, D. C., 1977, p. 168.

The Bank further adds:

> The downward trend of merchandise exports in 1970 and 1972, their recovery in 1973 and 1974 and their fall in 1975 are directly attributed to fluctuations in the value of copper sales. In 1975, the 40 per cent decline in domestic productions caused a reduction in exports of that metal of $763 million, down 46.2 percent from 1974.[37]

The combined effect of the various restrictions on the export diversification approach suggests that there is little evidence to support the assumption of the Regional Development Act that export diversification will help reduce urban/regional imbalances in the distribution of resources and activities. The paradox is that the Regional Development Act is to reduce urban/regional imbalances through the same approach that early in the economic history of the country substantially helped to the rise of urban/regional imbalances, that is, the export of primary commodities to international markets in the 1818-1930 "outwardly-oriented" stage of national economic growth, as discussed previously in Chapter III.

In addition to the export diversification approach the Regional Development Act emphasizes the geographic decentralization of Chile's decision making structure and apparatus to help reduce urban/regional imbalances in the distribution of resources and activities. Decentralization of decision making, as against the economic and social elements of development policy, is already being applied at the regional level in some countries.[38] What has been almost completely

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[37] Ibid., p. 192.

[38] In Latin America, the chief examples are the programs of Superintendencia do Desenvolvimento do Nordeste (SUDENE) in Brazil; Corporación de Fomento del Norte (CORFONOR) and Corporación de Fomento del Centro (CORFODEC) in Ecuador; Corporación de Los Andes in Venezuela; and several development corporations in Peru. See "Basic Aspects of Latin American Development Strategy", Economic Commission for Latin America (ECLA), Document E/CN.12/836 Santiago, 1969.

missing however is the appropriate interrelation between these factors. Economic and social development policies have given little attention to the simultaneous promotion of public participation in the formulation and execution of policies. On the other hand, the majority of programs for popular participation and community development have so far seldom linked up with decisions on the allocation of national resources for social and economic development.[39]

The Regional Development Act, because of its emphasis on the idea that overall national development involves not merely regional socio-economic growth but also changes in the distribution of decision-making powers, relates the economic component with the "participation" component of development. On the one hand, if a favorable economic base for export diversification exists in any given region, the emphasis on increased external trade will promote incentives for economic development and, as a consequence, produce social transformation in these areas (usually a modernization of social structures). Induced social modernization may in turn increase the potential demand for greater participation in the national decision making process.

On the other hand, emphasis on the decentralization of decision-making powers will enable the regions to realize new economic opportunities, attract outside resources, and finally press the central government for greater financial allocations. In the particular case of border regions, such as Regions I and XII, the growing ability of these areas for self-direction can help these regions

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[39]See "Conceptos y Métodos de la Programación por Zonas para el Desarrollo de la Comunidad", Economic Commission for Latin America (ECLA), Boletín Económico de América Latina, 12 (1967), no. 1, pp. 2-31.

to urge the central government to make greater financial allocations in exchange for national unity.[40]

The potential contribution to Chile's decentralization of decision making to overall national development is of international relevance. An important reason for the interest of countries in the decentralization of decision making is that over-centralization of decision making powers and functions is no longer adapted to the conditions of the modern world; in a number of sectors such as education, health, agriculture, and tourism, there is a need to multiply the centers of decision and to give room to the inhabitants of the regions to participate in decisions affecting their livelihoods and well-being.

On the other hand, each part of a country has to be related to the whole, since for many purposes the country must be considered a unity. For instance, the demand of politically strong regions for national funds can become a handicap for the realization of a consistent national development policy. Similarly, regional autonomies in decision making not based on specific objectives may run counter to the necessity of a national coordination of scarce development funds.

A delicate balance has to be struck between the functions thought appropriate at the regional level and those of the national central government. On this argument, Walter Stohr makes the

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[40]John Friedmann defines "self-direction" as "the capacity (of a region) in mobilizing and using resources in the service of self-defined objectives." John Friedmann, "The Future of Urbanization in Latin America. Some Observations on the Role of Periphery," Studies in Comparative International Development, 5 (1969-70), no. 9.

following comment:

> (There) is a worldwide search for a new type of non-hierarchical dialogue between different levels of government, and the need to introduce development-oriented rather than statically administrative decision making structures at each level. It may well be that both the traditional federal concept as well as the pure unitary system have become outdated by the requirements of multilevel development policy. This refers not only to developing but also to developed countries. Federal systems in many parts of the world find State autonomy an almost insuperable obstacle to co-ordination (United States of America, Federal Republic of Germany, Canada) and some of the larger unitary states find it very hard to extend the geographic reach of their central institutions in order to cope with the development problems of the entire country (France, Peru).[41]

In conclusion, the geographic decentralization of decision making in Chile provides not only the active element of the Regional Development Act in the reduction of urban/regional imbalances, but also innovative guidelines for other countries of the world.

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[41]Walter Stohr, op. cit., p. 72.

TABLE VI-1

Political Organization of the Chilean Continental Territory, Including Population, Area, and Density

Region	Territorial Units	Population (1970)	Area (Km^2)	Density	Regional Capital City	Main Regional Cities
I	Tarapacá	175.089	58,072.7	3.01	Iquique	Arica; Iquique
II	Antofagasta	251,557	125,306.3	2.01	Antofagasta	Antofagasta; Calama
III	Atacama	152,758	78,267.5	1.95	Copiapó	Copiapó; Vallenar
IV	Coquimbo	339,439	39,647.0	8.58	La Serena	Coquimbo; La Serena
V	Aconcagua Valparaíso San Antonio	972,864	16,895.6	57.65	Valparaíso	Los Andes; San Felipe Valparaíso; Viña del Mar Quilpué; San Antonio
Metropolitan	Santiago	3,160,619	15,781.7	199.90	Santiago	Santiago
VI	O'Higgins Colchagua	474,825	15,432.3	30.80	Rancagua	Rancagua; Rengo San Fernando
VII	Curicó Talca Maule Linares	618,713	30,518.1	20.29	Talca	Curicó; Talca; Molina Cauquenes; Constitución Linares; Parral
VIII	Ñuble Concepción Arauco Bío-Bío	1,252,930	36,007.2	34.81	Concepción	Chillán; San Carlos Bulnes; Concepción; Tomé Talcahuano; Lota; Coronel Huachipato; Los Angeles
IX	Malleco Cautín	596,303	32,471.8	18.47	Temuco	Angol; Victoria Temuco
X	Valdivia Osorno Llanquihue Chiloé	747,895	72,608.7	10.27	Puerto Montt	Valdivia; La Unión Osorno; Río Negro Puerto Montt; Castro Puerto Varas; Ancud
XI	Aysén	48,423	103,583.9	.47	Coyhaique	Coyhaique

TABLE VI-1 (Cont.)

Political Organization of the Chilean Continental Territory, Including Population, Area, and Density

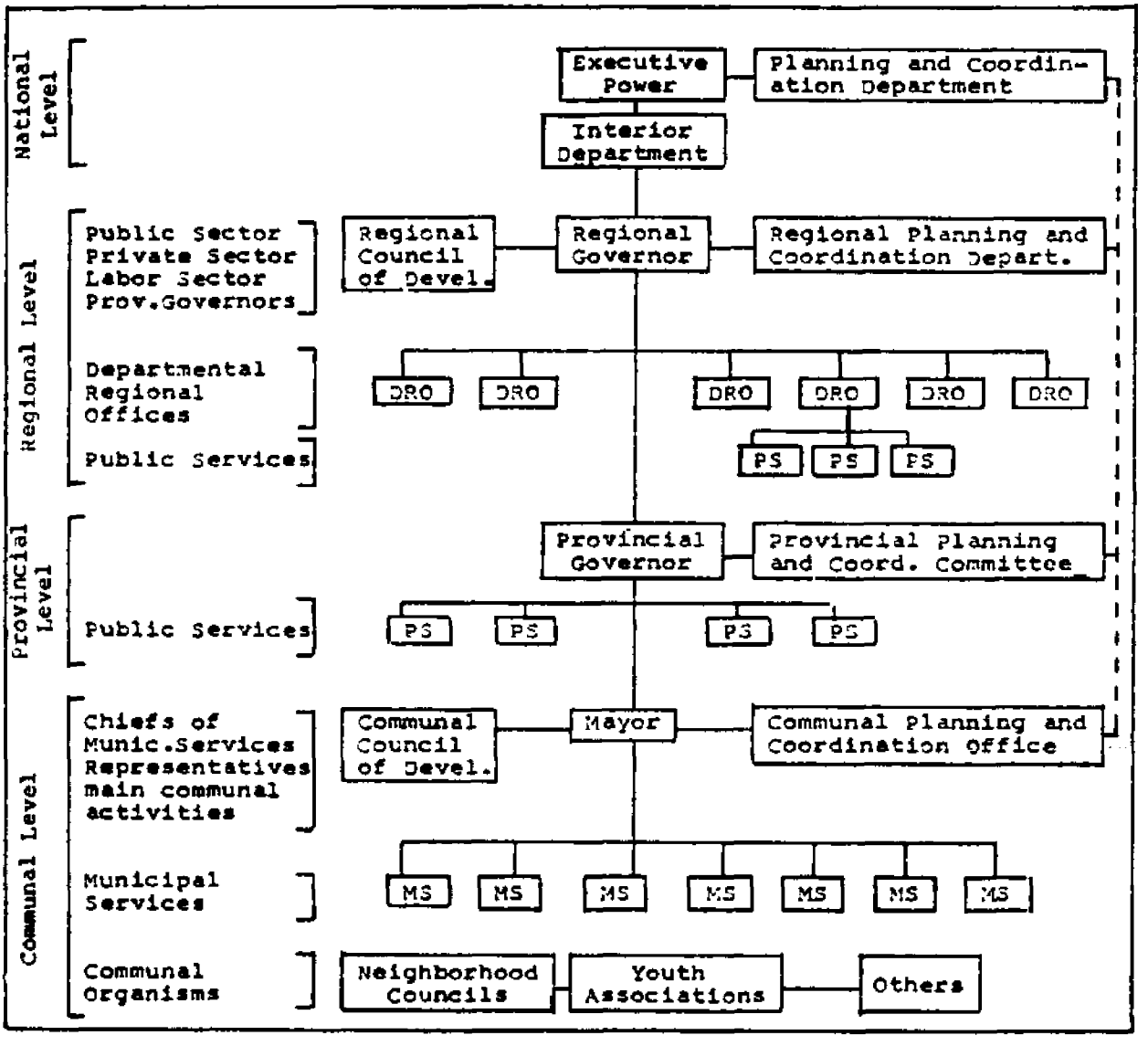
Region	Territorial Units	Population (1970)	Area (Km^2)	Density	Regional Capital City	Main Regional Cities
XII	Magallanes[1]	89,474	132,033.5	.68	Punta Arenas	Punta Arenas
TOTAL		8,880,889	756,626.3	11.70		

[1] The Antarctic Territory, attached to the 12th Region has an area of 1,250,000 square kilometers.

SOURCE: Chile. Census of 1970.

TABLE VI-2

The Political System of Chile
Structure and Function



SOURCE: Decree Law 575, July, 1974

TABLE VI-3

CLASSIFICATION OF CHILE'S INDUSTRIAL MANUFACTURING ACTIVITIES

Activity	Description
200	Food Manufacturing
210	Beverage Industries
220	Tobacco Manufactures
230	Manufacture of Textiles
240	Footwear and Wearing Apparel
250	Manufacture of Wood and Wood Products
260	Manufacture of Furniture and Fixtures
270	Manufacture of Paper and Paper Products
280	Printing, Publishing and Allied Industries
290	Manufacture of Leather, except Footwear and Wearing Apparel
300	Manufacture of Rubber Products
310	Manufacture of Industrial Chemicals
320	Petroleum Products and Coal Products
330	Manufacture of Non-Metallic Mineral Products, except Petroleum and Coal Products
340	Basic Metal Industries
350	Manufacture of Fabricated Metal Products
360	Manufacture of Machinery except Electrical
370	Manufacture of Electrical Machinery Apparatus, Appliances and Supplies
380	Manufacture of Transport Equipment
390	Other Manufacturing Industries

SOURCE: Chile; Instituto Nacional de Estadística y Censos (INE), Censo Nacional de Manufactureras. Santiago, 1967.

TABLE VI-4

CHILE'S SYSTEM OF REGIONS*

Region	Provincial Units
I	Tarapacá
II	Antofagasta
III	Atacama-Coquimbo
IV	Aconcagua-Valparaíso
V	O'Higgins-Colchagua
VI	Curicó-Talca-Maule-Linares
VII	Ñuble-Concepción-Arauco-BíoBío
VIII	Malleco-Cautín
IX	Valdivia-Osorno
X	Llanquihue-Chiloé-Aysén
XI	Magallanes
Metropolitan Region	Santiago

* This is the system of regions used by the National Planning Office in 1969. The Regions do not coincide with the regions created by the Regional Development Act.

TABLE VI-5

CHILE: MANUFACTURING EMPLOYMENT BY REGION AND BY ACTIVITY, 1967

Industries \ Regions	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	M.R.	Total
200	2,930	1,379	1,719	9,446	1,994	3,122	7,592	1,092	2,254	2,356	1,248	21,733	56,865
210	109	360	352	1,287	819	1,018	817	7	110	165	20	4,040	9,104
220	-	-	-	1,380	218	-	39	-	-	-	-	41	1,688
230	588	10	19	4,768	7	121	5,394	93	640	112	125	27,037	38,914
240	104	214	178	3,192	266	511	1,279	175	697	31	24	26,760	33,425
250	159	180	122	880	377	943	6,495	871	3,132	740	200	5,200	19,299
260	182	239	93	759	125	120	1,344	181	275	163	85	5,690	9,256
270	17	-	-	494	65	98	2,192	-	-	-	-	2,930	5,796
280	152	846	137	985	117	129	564	209	219	87	92	5,598	9,135
290	5	-	28	354	12	106	358	180	132	49	5	3,768	4,997
300	-	27	-	160	-	5	70	16	40	-	-	2,700	3,022
310	345	2,306	219	1,309	15	100	381	21	6	-	23	11,580	16,305
320	-	-	-	364	-	-	669	-	-	-	126	720	1,879
330	175	99	54	1,440	153	98	3,758	141	80	41	102	8,471	14,612
340	-	-	597	1,326	-	103	6,935	15	40	-	-	5,642	14,658
350	243	1,873	51	1,214	174	294	1,235	349	354	121	102	18,499	24,509
360	-	10	319	979	394	156	679	207	426	37	43	7,309	10,559
370	824	527	-	670	16	140	38	46	39	16	35	8,979	11,330

TABLE VI-5 (Cont.)

CHILE: MANUFACTURING EMPLOYMENT BY REGION AND BY ACTIVITY, 1967

Regions / Industries	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	M.R.	Total
380	2,789	240	978	2,486	533	483	3,171	361	966	264	303	12,077	24,651
390	141	5	46	728	513	525	117	170	29	36	5	8,904	11,219
Total	8,769	8,315	4,912	34,231	5,798	8,076	49,121	4,134	9,439	4,218	2,538	187,678	321,223

SOURCE: Oficina de Planificación Nacional, Santiago, 1969

TABLE VI-6

REGIONAL ABSOLUTE SPECIALIZATION IN MANUFACTURE, 1967

Region	Activity
I	200; 380; 370
II	310; 350; 200
III	200; 380; 340
IV	200; 230; 240
V	200; 210; 380
VI	200; 210; 250
VII	200; 340; 250
VIII	200; 250; 380
IX	250; 200; 380
X	200; 250; 380
XI	200; 380; 250
M.R.	230; 240; 200

TABLE VI-7

CHILE: REGIONAL RELATIVE SPECIALIZATION IN MANUFACTURING, 1967

Regions / Industries	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	M.R.	Total
200	33.4	16.6	35.0	27.6	34.4	38.7	17.6	26.4	23.9	56.0	49.2	11.6	17.7
210	1.2	4.3	7.2	3.8	14.1	12.6	1.9	0.2	1.2	3.9	0.9	2.2	2.8
220	-	-	-	4.1	3.8	-	0.1	-	-	-	-	-	0.5
230	6.7	0.1	0.4	13.9	0.1	1.5	12.5	2.2	6.8	2.6	4.9	14.4	12.1
240	1.2	2.6	3.6	9.3	4.6	6.3	3.0	4.2	7.4	0.7	0.9	14.2	10.4
250	1.8	2.2	2.5	2.6	6.5	11.7	15.1	21.1	33.2	17.3	7.9	2.8	6.0
260	2.1	2.9	1.9	2.2	2.2	1.5	3.1	4.4	2.9	3.9	3.3	3.0	2.9
270	0.2	-	-	1.4	1.1	1.2	5.0	-	-	-	-	-	-
280	1.7	10.2	2.8	2.9	2.0	1.6	1.3	5.1	2.3	2.1	3.6	3.0	2.8
290	0.2	-	0.6	1.0	0.2	1.3	0.8	4.3	1.4	1.2	0.2	2.0	1.6
300	-	0.3	-	0.5	-	0.1	0.2	1.4	0.4	-	-	1.4	0.9
310	3.9	27.7	4.5	3.8	0.3	1.2	0.9	0.5	0.1	-	0.9	6.2	5.1
320	-	-	-	1.1	-	-	1.6	-	-	-	5.0	0.4	0.6
330	2.0	1.2	1.1	4.2	2.6	1.2	8.6	3.4	0.8	0.1	4.0	4.5	4.5
340	-	-	12.2	3.9	-	1.3	16.1	0.4	0.4	-	-	3.0	4.6
350	2.8	22.5	1.0	3.5	3.0	3.6	2.9	8.4	3.8	2.9	4.0	9.8	7.6
360	-	0.1	6.5	2.9	6.8	1.9	1.6	5.0	4.5	0.8	1.7	3.9	3.3
370	9.4	6.3	-	1.9	0.3	1.8	0.1	1.1	0.4	0.4	1.4	4.8	3.6

TABLE VI-7 (Cont.)

CHILE: REGIONAL RELATIVE SPECIALIZATION IN MANUFACTURING, 1967

Regions / Industries	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	M.R.	Total
380	31.8	2.9	19.8	7.9	9.2	6.0	7.3	8.8	10.2	6.2	11.9	6.3	7.7
390	1.6	0.1	0.9	2.1	8.8	6.5	0.3	4.1	0.3	0.8	0.2	4.7	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE VI-8

SUMMARY OF REGIONAL RELATIVE SPECIALIZATION IN MANUFACTURING, 1967

Region	Absolute Specialization	Relative Specialization
I	200; 380; 370	200; 380; 370
II	310; 350; 200	310; 350; 280; 370; 210
III	200; 380; 340	200; 380; 340; 210; 360
IV	200; 230; 240	200; 230; 220; 210; 280; 320
V	200; 210; 380	200; 210; 230; 220; 280; 320
VI	200; 210; 250	200; 210; 250; 390
VII	200; 340; 250	340; 250; 230; 330; 270; 260; 320
VIII	200; 250; 380;	200; 250; 380; 350; 280; 351; 260; 290; 300
IX	250; 200; 380;	250; 200; 380; 360
X	200; 250; 380	200; 250; 210; 260
XI	200; 380; 250	200; 250; 260
M.R.	230; 240; 200	230; 240; 350; 310; 370; 390; 360 260; 280; 290; 300

TABLE VI-9

LOCATION QUOTIENTS (EMPLOYMENT BASE) BY REGIONS AND BY ACTIVITY, 1967

Regions / Industries	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	M.R.
200	1.89	8.94	1.98	1.56	1.94	2.19	0.99	1.49	1.35	3.16	2.78	0.66
210	0.43	1.54	2.57	1.36	5.04	4.50	0.68	0.07	0.43	1.39	0.32	0.79
220	-	-	-	8.20	7.60	-	0.20	-	-	-	-	-
230	0.55	0.00	0.03	1.15	0.01	0.12	1.03	0.18	0.56	0.21	0.04	1.19
240	0.12	0.25	0.35	0.89	0.44	0.61	0.25	0.40	0.71	0.07	0.09	1.37
250	0.30	0.37	0.42	0.43	1.08	1.95	2.52	3.52	5.53	2.92	1.32	0.47
260	0.72	1.00	0.66	0.76	0.76	0.52	1.07	1.52	1.00	1.34	1.14	1.03
270	0.11	-	-	0.78	0.61	0.67	2.78	-	-	-	-	0.89
280	0.61	3.64	1.00	1.04	0.71	0.57	0.46	1.82	0.82	0.75	1.29	1.07
290	0.13	-	0.38	0.63	0.13	0.81	0.50	2.69	0.87	0.75	0.13	1.25
300	-	0.33	-	0.56	-	0.11	0.22	0.44	0.44	-	-	1.56
310	0.76	5.43	0.88	0.75	0.06	0.24	0.18	0.10	0.02	-	0.18	1.22
320	-	-	-	1.83	-	-	2.66	-	-	-	8.33	0.67
330	0.44	0.27	0.24	0.93	0.58	0.27	1.91	0.76	0.18	0.22	0.89	1.00
340	-	-	2.65	0.85	-	0.28	3.50	0.09	0.09	-	-	0.65
350	0.37	2.96	0.13	0.46	0.39	0.47	0.38	1.11	0.50	0.38	0.53	1.29
360	-	0.03	1.97	0.88	2.06	0.58	0.48	1.52	1.36	0.24	0.52	1.18
370	2.61	1.75	-	0.53	0.08	0.50	0.03	0.31	0.11	0.11	0.39	1.33

TABLE VI-9 (Cont.)

LOCATION QUOTIENTS (EMPLOYMENT BASE) BY REGIONS AND BY ACTIVITY, 1967

Regions / Industries	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	M.R.
380	4.13	0.38	2.57	0.94	1.19	0.78	0.95	1.14	1.32	0.81	1.55	0.82
390	0.46	0.03	0.26	0.06	2.51	1.86	0.09	1.17	0.09	0.23	0.06	1.34

CHAPTER VII

Conclusion

Geographic imbalance in the distribution of resources and activities has been the pattern in Chile since colonial times. Independence from Spain in 1818 changed little, if at all, the political, cultural and economic preeminence of the Metropolitan Region and its major city, Santiago. Moreover, as seen in Chapter II, the beginning of large-mining activities in the late nineteenth and twentieth centuries reinforced the dominance of the Metropolitan Region as the national commercial and financial center. More significantly, control of the mining resource surplus by the Metropolitan Region served as the basis for the consolidation of central power, regional dominance, and the furthering of urban/regional imbalances in the distribution of resources and activities.

The expansion of manufacturing, which began in the 1930's in the form of import-substitution industry, was located primarily in Santiago and, to a much lesser extent, in Valparaíso and Concepción. This increased urban/regional imbalance. At the same time, the gradual shift of the population from rural to urban settlement, particularly the exodus of rural populations toward Santiago, further accentuated the pattern of urban/regional imbalance.

Presently, the recognition of the magnitude of urban/regional imbalances is influencing policy formulation. The view is that a solution to the problem of spatial imbalances in the distribution of resources and activity can contribute to improving the prospects for overall national development and modernization. The Regional Develop-

ment Act of 1974 is intended to fulfill this objective.

The urban/regional problems with which Chile is confronted are common to developing countries and to some developed nations as well. In these countries densely populated urban and industrial areas contrast sharply with stagnating, generally rural areas, with declining populations. The excessive concentration of population and wealth in a major center, usually the capital city, is the most serious aspect of this imbalance. These conditions in turn have led to imbalances in the settlement pattern and differences in degree and structure of economic development and social well-being. In order to cope with the consequent problems of overpopulation, economic imbalance and, in the long run, for the provision of anticipated population growth, the adoption of urban/regional development policies appears not only as a cure for the specific problems of cities and regions, but as a way to solve the more acute problems of underdevelopment. It is in this context that Chile's Regional Development Act gains relevance.

The Regional Development Act is a policy national in scope and application and multiple in direction. The policy is designed to provide relief to economically-depressed areas, and to modify the existing patterns of urban/regional imbalances in the distribution of resources and activity in order to help overcome problems of urban overpopulation, economic imbalance and pockets of extreme poverty. In pursuit of these objectives emphasis is placed on two lines of action: a) the diversification of regional exports; and b) the geographic decentralization of the country's decision making structure and apparatus. Export diversification is to bring into use labor and other resources that would otherwise be idle, and to help

each region to make the most effective use of its productive capacity. The decentralization of decision making is to provide scope for regional populations to participate in decisions affecting their livelihoods and well-being.

However, as documented in Chapter VI, there is little evidence to support the assumption that export diversification will reduce urban/regional imbalances as far as the Chilean case is concerned. For instance, the view that such a strategy will lead to a decentralization of economic activity away from the Metropolitan Region is not borne out. The diversification of exports in the industrial manufacturing sector points out to the increased agglomeration of industrial activity in the Metropolitan Region, rather than the reverse.

It should be pointed out that export diversification coupled with free market pricing policies has had favorable effects on a number of variables in the nation's economy. The annual rate of inflation, a major variable influencing the success of urban stabilization and redistribution policies, has been slowed to 64 percent in 1977 after having soared to 508, 376, 341 and 174 percent in 1973, 1974, 1975 and 1976, respectively.[1] Futhermore, the move toward a free market pricing system combined with the positive attitude toward the idea of producing for export has led to substantial price increases in agricultural commodities. For a sector which has been stagnated since the 1870's the price revival is a blessing.[2]

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[1]Inter-American Development Bank, Economic and Social Progress in Latin American, 1977 Report. Washington, D. C., p. 188.

[2]Ibid., p. 185.

The decentralization of decision making appears as a more viable instrument to the reduction of urban/regional imbalances than the export diversification approach. In the financial field, the Regional Development Act tackles the problem of fiscal income and expenditure at the regional level through the establishment of the National Fund for Regional Development,[3] the Fund for the Financing of Municipalities, and the recognition by the central government of the right of regions to control and manage regional budgets. In respect to local involvement, the introduction of planning, coordination and administration structures at the regional level along with the scope given to regional populations to participate through these structures in decisions affecting their livelihoods and well-being represents both an important breakthrough in Chilean politics and a guideline for other developing countries with centralized decision-making systems.

While emphasizing the economic and social inputs, policies for national development in developing countries have usually neglected the decision making component to development. As a result, these policies have generally failed to lead to anything approaching comprehensive development. The Regional Development Act recognizes that overall national development involves not merely regional socioeconomic growth but also changes in the distribution of decision making powers between the regional and local governments and the central government.

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[3]In 1978, the National Fund for Regional Development made US $60 million available "to address urgent regional problems which had previously escaped detection by central ministries." Chile Economic News, no. 95, New York, February, 1979.

The question still remains whether the benefits accruing from the export diversification approach and the geographic decentralization of decision making will filter down to the more disadvantaged sectors of the Chilean population. The Regional Development Act assumes that those with adequate standards of living will improve them, while neglected groups will move toward adequate standards. It will be interesting to review the degree and manner in which this and other objectives of the Regional Development Act of 1974 are fulfilled in following the course of Chile's national development.

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VITA

José Washington Stevenson was born in Santiago, Chile. He attended the University of Chile for two years before transferring to Jacksonville State University, Alabama, in 1970. He received a Bachelor of Arts degree in English in 1972.

He entered the Latin American Studies Institute at Louisiana State University in 1972. He received his Master of Arts degree in Latin American Studies in 1974. He did dissertation research in Santiago, Chile for eighteen months, and returned to Louisiana State University in 1978-79 to complete his studies.

EXAMINATION AND THESIS REPORT

Candidate: Jose Washington Stevenson

Major Field: Latin American Studies

Title of Thesis: Urban-Regional Imbalance and Chilean National Development

Approved:

R Cardenas Jr
Major Professor and Chairman

James B. Trapnell
Dean of the Graduate School

EXAMINING COMMITTEE:

Peter Ward

R Cobb Crist

Jane Le Drummond

Lucie V. Marinone

Date of Examination:

April 2, 1979